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THE SPARKER

A new way of flying

AVIATION ADVENTURERS

Journeys around the Globe

ISSN 2652-6794

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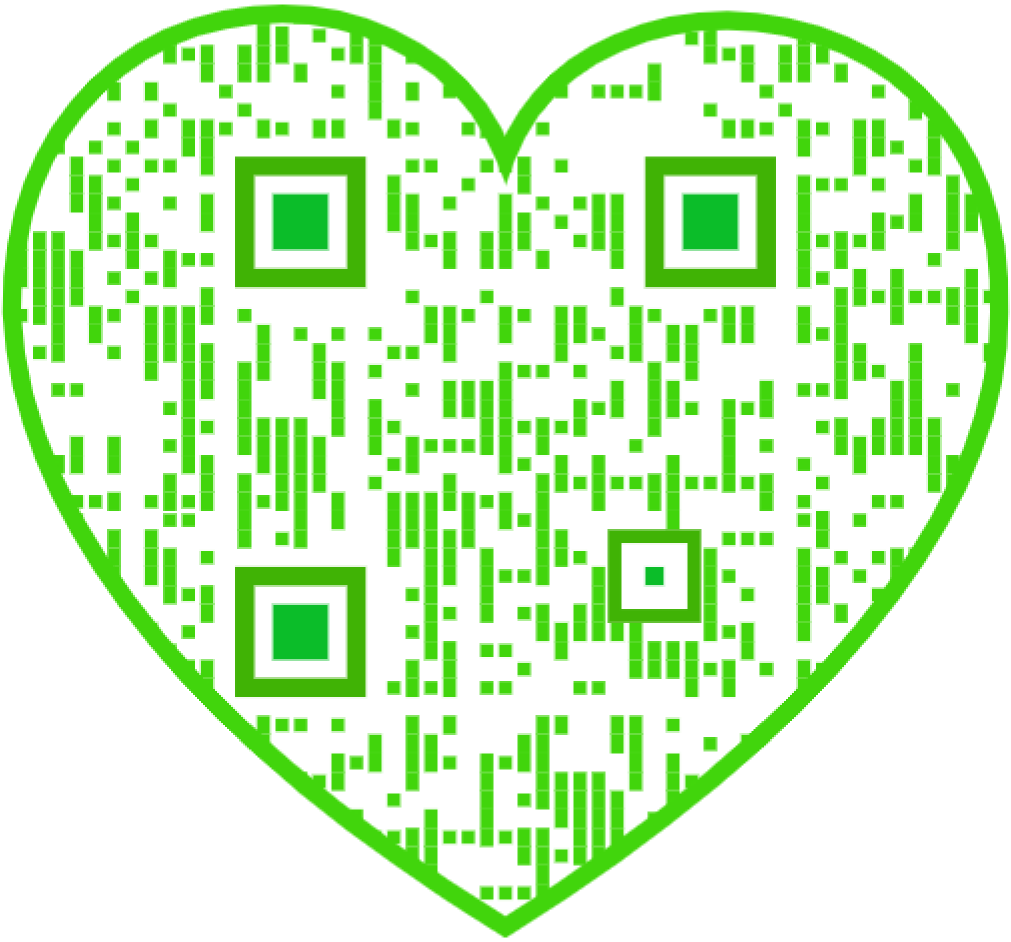
AVIATION AUSTRALIA

VOYAGE OF THE SOUTHERN SUN ● KITTY HAWK TO EVTOL ● A LONG WAY ROUND THE WORLD



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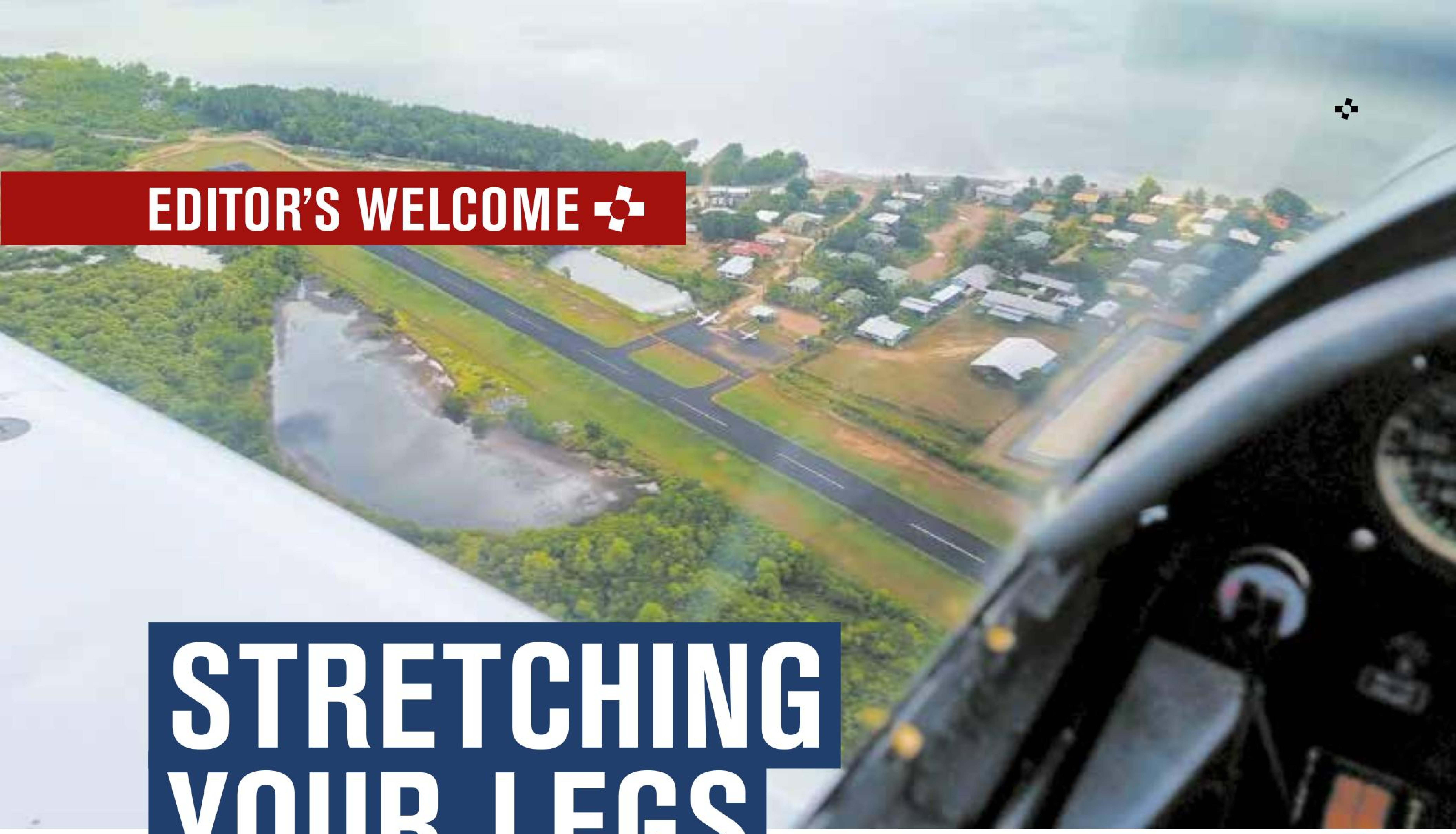

STRETCHING YOUR LEGS

Me flying at Boigu Island on the edge of international airspace and pondering the possibilities.

We've put together some great stories for the armchair traveller in this edition, as we always try to do for the summer edition. Not one, but two round the world stories, albeit with one still in the planning and build phase. They have inspired me to consider an overseas flight, hopefully next year. You'll read about it here if I do. I'm also staggered by the aircraft we are seeing that will be hitting the market soon in terms of their speed and range. To date, my longest flying days have covered a thousand nautical miles. That only gets me part of the way across Australia, but it would get me from London to Tunis, Algeria. That's a whole continent away. It underscores that Australia is a special case with its tyranny of distance. There will always be a big place in RAAus for aircraft used for training and the sheer joy of flight. Nothing beats just goofing around in a light plane. There's plenty of fun to be had flying back country or STOL'ing. But to seriously challenge mainstream aviation and offer a real alternative, these are the sort of aircraft we need added to the roster.

The RAAus staff and Chair have put together some really good articles around safety and safe flying practices. There's a lot of good info in there that might just save your life, so take the time to check it out. I've already learned several new things in reading these articles.

The really positive stories in this edition for me are about young aviators. I feel the future of aviation and our segment is secure when I look at the calibre of these people. When I was that age I was still scratching myself and bumping into things (some would argue nothing has changed) so I can't help but be impressed by these people who have done so much, so early.

We love to hear your inspiring stories and getting your letters, so keep them coming in. Want to see a story or have an idea? Let us know. Send it all in to **editor@sportpilot.net.au**

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LETTERS

WRITE IN: We love to hear from you! Get in touch with us at **editor@sportpilot.net.au or on Facebook & Instagram @sportpilotmagazine**

Issue 108: Lawrence Hargrave Article

Editor,
I have just finished reading and enjoying the above issue.

It is pleasing to read about our Aviation personalities, and both Lawrence Hargrave and Henry Millicer are such deserving people. I agree with the writer that Hargrave deserves a more prominent and knowledgeable position in our history (even though he was featured on the Australian $20 note 1966-1994).

In respect to the Wright brothers being the first powered flight page 34, this is not strictly correct. It is recorded as the first Successful, Sustained and Controlled powered flight. There were a number of powered flights that occurred before the Wrights, which however were deemed uncontrolled, or supported by a wire line.

Their first flight on the 17th December 1903 is the one officially credited as meeting the above criteria. I guess there are different opinions as to what is considered sustained and controlled. Think about it; a 12 second flight covering 120 ft. (36.576 metres); would not get to the end of your urban (or rural) Olympic swimming pool starting from one end (sustained!)! The second or third flights were 175ft. (53m) and 200ft. (61m) respectively. Perhaps the fourth flight of 852 ft. (259.69m) would have been a more appropriate accepted qualification.

I understand all flights were up to 14ft. (4.26m). At this height and below I wondered how much ground effect assisted. It's within the height above ground range. Maybe someone can advise (Wingspan 40.4 ft. (12.29m.), Wing area (47m2), Average Headwind Speed 27mph (43kmh), and Aircraft ground speed 6.8mph (10.9kmh)?

Another challenge is whether Gustav Whitehead beat the Wright brothers by two years (1901)?

There has been, and is continuing, debate for and against this claim.

Anyway, I digress. My main point is that of paragraph 3.

Regards
Colin Ekert, Ellenbrook WA

Editor: *Hi Colin,*
I am a big Hargrave fan too. On the matter of first powered flight, yes I agree. The Wright brothers have won the PR battle, but there's plenty of other contenders. Whitehead in the US and Pearse in NZ. And not forgetting that Otto Lilienthal was flying longer and further in his 10 years earlier. But the grandaddy of the all has to be Wan Hu with his rocket powered kite of circa 1390. I'm not sure if its true, but I'd like it to be.

Dear Editor,
It is common that some trainee pilots will fly an excellent circuit, with faultless checks, and yet experience judgement problems during the flare and hold off. On a normal (flapped approach) the time factor during the flare and touch down is rather short and abrupt without allowing much time for the trainee pilot to practice the required control inputs. Additionally, the steeper approach, compared to a flapless approach, may also entail something of a "ground rush" sensation at the flare. The flapless approach has been to date mainly taught and stressed as an emergency technique, to address flap failure. In a flapped aeroplane the flapless approach is usually introduced much later than the flapped approach.

However, the flapless approach permits a longer period of hold-off or float, thus allowing the trainee pilot more time to assess what is occurring and practice at keeping the aeroplane “skimming” along above the runway by whatever means are required for a light touch-down on the main gear.

I have found that when moving on to the flapless approach after the flapped, many trainees respond much better to this delated period above the runway enabling them to “get their eye in” more easily and make the required corrective actions with the controls. After many years of instructing, I am a bit confounded why I have not considered teaching a flapless approach before the flapped approach up until now.

I understand that in in some instructing circles the flapless approach is considered something greatly different from a flapped approach. It is considered more of an emergency technique due to inherent problems and dangers including reduced visibility over the nose on approach, faster airspeed, greater radius of turn onto final approach, easier to balloon, longer landing distance and directional control requiring smaller rudder movements.

Teaching the flapped approach first has been considered the norm from time immemorial, in my experience. I would invite comment on my proposition that in future I intend to trial teaching the flapless approach before introducing the flapped approach.

Regards
Rob Glenn

Editor: *Hi Rob,*
I think we’re unlikely to shift the flapped approach for the ab intitio pilot because of the lower stall speed and better angle of view it offers. However, you raise a good point about the flapless approach. A flapless approach should be in everyone’s toolkit – not just for the day the flaps are inop. I was taught that for strong headwinds and some crosswind situations a flapless approach was appropriate and practised accordingly. I still make a flap “decision” before landing – not just a full flap every time. Good point and happy to hear others opinions.

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THE RED SPARROW

FROM THE CEO

MAXINE MILERA
CEO

For nearly two decades, Maxine has been part of RAAus. As the organisation transitions, she is honoured to have stepped into the role of RAAus' first female CEO, supported by an exceptional team. Together, Maxine looks forward to continuing RAAus' legacy of safety, community, and innovation, inspiring aviators for generations to come.

ceo@raaus.com.au

Reflecting on 2024, it's incredible to think how quickly the time has flown by. This past year has been full of memorable moments, such as the *Fly'n For Fun* gathering in Parkes and the CFI Conference in Brisbane. These events have brought our community closer together, showcasing our shared passion for excellence and innovation in recreational aviation.

The team has been working diligently towards executing the strategic plan set by the board, with a focus on growth, innovation, and sustainability. A significant part of this plan involves ensuring that we diversify our income streams to help keep our membership fees as affordable as possible. To spearhead these efforts, we have appointed a new Business Development Manager, Ben Lambon, who brings a wealth of experience in identifying new opportunities and building partnerships. This role is pivotal in exploring alternative revenue sources that will allow us to enhance member services without increasing costs.

Part of this journey involves reviewing feedback from our members. One area that has garnered some constructive criticism is our shop, particularly regarding the range of merchandise we offer and the use of the RAAus logo on these items. We recognise the importance of merchandise in both promoting our brand and providing value to our members. While we have received some criticism, we see it as an opportunity to rethink our offerings. We are open to experimenting with new designs, products, and ideas, ensuring that we cater to the diverse preferences of our community.

At RAAus, we firmly believe that no idea is too small or unworthy of consideration. We are keen to trial fresh approaches and continue to innovate in how we generate revenue–all with the goal of maintaining affordability for our members. Whether through expanding our merchandise range, introducing new member benefits, or creating partnerships that bring added value, our focus remains on delivering the best experience while keeping fees manageable.

Additionally, we have introduced newly designed membership cards, including exclusive lifetime membership cards, which have been warmly received by our members. These new cards not only represent a fresh look but also reflect our ongoing commitment to enhancing the overall membership experience. The lifetime membership cards, in particular, have been designed to honour the long-term dedication of our members, offering a special token of appreciation for their continued support and loyalty to RAAus.

In keeping with this goal, we recently launched a completely revamped RAAus website. The new design focuses on improving user experience, making it easier for members to find information, and to stay updated on the latest news and events. We've listened to member feedback and incorporated features that make navigating the site more intuitive, ensuring that important resources are more accessible to both seasoned aviators and newcomers alike.

Looking ahead, we're also working on a more user-friendly Aviation Classifieds site. This platform is being built to provide a seamless and efficient experience for those looking to buy, sell, or trade aircraft and aviation-related products. With enhanced search capabilities and a cleaner interface, the new Classifieds site will offer an upgraded service for members and the wider aviation community, making it easier to connect with others and engage in the marketplace.

> **At RAAus, we firmly believe that no idea is too small or unworthy of consideration.**

This year also marked the retirements of Jill Bailey, after 15 years, and Janelle Wayling, after 16 years. Their contributions to RAAus have been immense, and they will both be deeply missed.

The *Fly'n For Fun* event in Parkes created a vibrant atmosphere of camaraderie and fun, welcoming aviation enthusiasts of all ages. The CFI Conference in Brisbane was another highlight, fostering knowledge-sharing among instructors and reinforcing the importance of continuous learning in aviation training.

As we move forward, RAAus remains committed to embracing new opportunities and challenges, with a focus on diversification, safety, training, and community growth. Together, we look forward to an exciting future in recreational aviation.

As the festive season approaches, we'd like to wish all our members a safe and joyous Christmas. Whether you're soaring through the skies or enjoying time with loved ones, we encourage everyone to prioritise safety, especially during the Christmas break. Happy flying, and we can't wait to see what 2025 holds for our wonderful community!

Merry Christmas.

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FLIGHT TEST REVIEWS OF GREAT AIRCRAFT

THE CIRRUS

KILLER?

DREAMING ABOUT THE NEXT GENERATION OF GROUP G AIRCRAFT

Words **Nicholas Heath**

In front the new Group G Registerable Sparker with the Rotax 916, behind is the original Sparker with the Rotax 912.

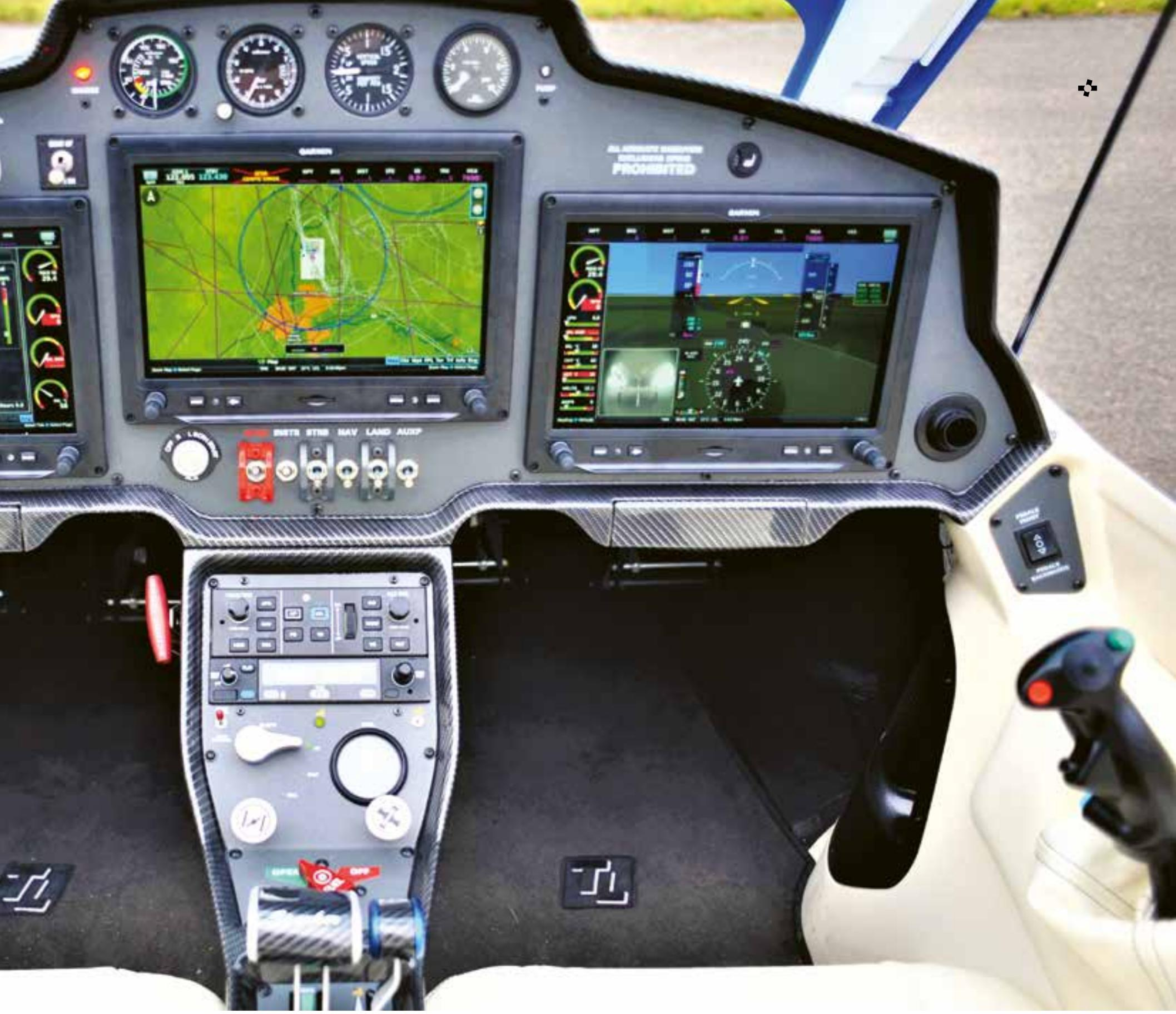
Imagine climbing in to your aircraft in the morning at Lilydale, just on the edge of Melbourne. Then, setting off through a nice, clear morning sky. Later that afternoon you're descending in to Redcliffe, Brisbane for a late lunch. With no fuel stop, averaging 170 knots. That's what the next generation of Group G aircraft will be able to do.

The Sparker represents a new wave of aircraft that will fulfill the promise of Group G aircraft in the future. Let's start with weight. At 750kg MTOW and 390kg empty, you have 360kgs of useful load. So, take two 90kg pilots, 95kg of fuel (130 litres) and a healthy 30kgs of luggage and you still have 55kg of capacity available. Which begs the question, could we hypothetically add extended range tanks? With a massive capacity of 180 litres, that will still leave you with plenty of scope if you have been hitting the cheese burgers a bit hard lately. That means you could be travelling almost a thousand nautical miles at a hop if you chose to. That's more useful in a there-and-back-again scenario, because, you know, bladders, etc. And you're doing it at 170 knots. But back in the circuit you have a docile 45 knots stall speed. We haven't seen it in the flesh yet, but when we do, we will be checking these claims.

> **The Sparker represents a new wave of aircraft that will fulfill the promise of Group G aircraft in the future.**

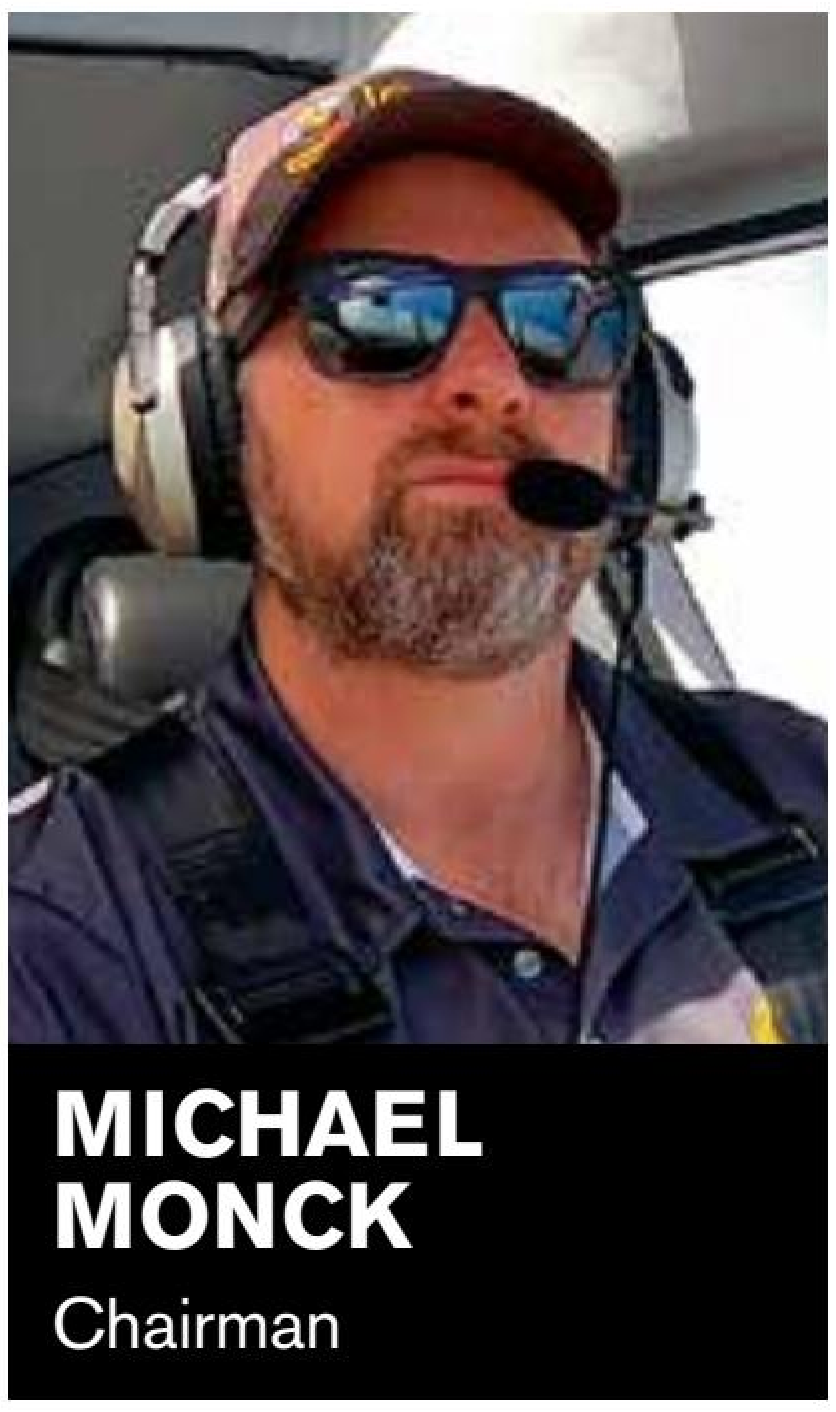
What about the money, you cry? Yep, the Sparker will set you back around $600K. That's a lot of cheddar. But look at the alternates. A new VH aircraft with this sort of range and speed will cost you $1.5 million easily. Add some options and you're closer to $2 million. Sure, that will be a 4-seater. But how often are you flying four-up? And if you do, what happens to your fuel payload and range? That point is underscored by the fact that the first Sparker customer in Australia is downsizing from a Cirrus.

Hopefully we will get to test fly this aircraft next year along with several others on the horizon that are aiming for this market segment. You will know as soon as we do. But it sounds like fun, doesn't it?



Bottom left: Leather interior of 1250 wide cockpit – slightly larger than the SR22 cockpit. Bottom Right: ‘Drop testing’ the Sparker during production for certification.

FROM THE CHAIR



MICHAEL MONCK
Chairman

Michael is the Chair of the Board of RAAus and has held this position for 10 years. He holds flying qualifications from RAAus and CASA and advocates for the broader industry in a number of different forums. Michael is an active pilot and owns a CTLS aircraft which he regularly flies throughout Australia.

michael.monck@raaus.com.au

The industry is evolving and the world around us is changing. This is change that we can't stop, fighting it would be futile. Even though RAAus is the single largest body of pilots and aircraft owners in Australia, we are small in the scheme of things. As I write this article, I am reflecting on events that have transpired over the past few weeks.

The MOSAIC project is picking up speed in the US. MOSAIC is the "Modernization of Special Airworthiness Certification" and opens up a range of possibilities for new aircraft types globally. In simple terms it is the expansion of light sport aircraft. In more correct terms, it is the birth of new aircraft entirely.

A week of committee meetings has recently concluded and this will culminate in the development of new standards and the revision of existing ones. Capabilities that have not previously been included in these aircraft will soon be possible. Activities such as instrument flight, operations in the airwork category and the addition of new equipment are all anticipated. In short, these new aircraft will be increasingly capable and, like the original cohort of light sport aircraft, will see the replacement of older aircraft in the existing fleet be replaced.

Perhaps one of the best aspects of this scheme is that certification can take place in a much simpler environment. Where a type certified aircraft must be certified by a national airworthiness authority, aircraft manufactured under this scheme may be certified by the factory. In today's world, where technology evolves much more rapidly than rules and regulations, this is a welcome thing. It allows aircraft manufacturers to be nimble and responsive to market trends and new technologies as they become available.

A potential downside of this though, is safety. Some may argue that the aircraft in the current category of light sport aircraft are themselves less safe due to things like weight constraints and so on, however, I will park this argument for another day. The safety implications in my view are more related to the rapid adoption of technology along with the introduction of new aircraft types.

> **Used properly, technology can make life much better, but when used in flawed ways the results can be equally flawed.**

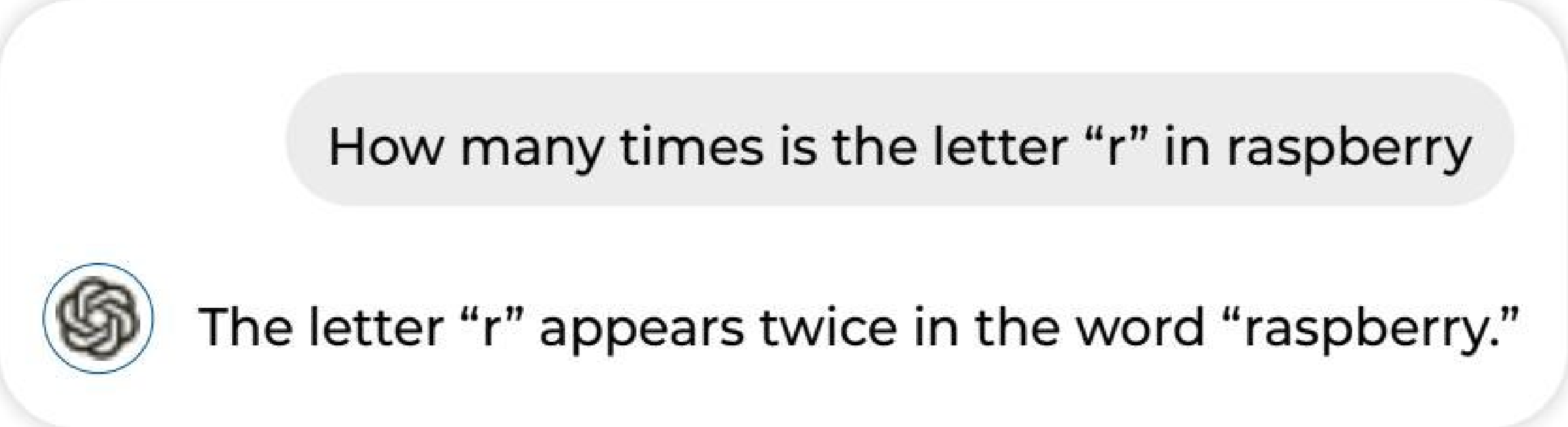
Things like synthetic vision, heads up displays, and augmented reality, are fast becoming possible today. As these things find themselves in the cockpits of new aircraft that enter the market, the challenge becomes educating pilots on their safe use and maintainers on the correct ways to maintain airworthiness.

In the most recent SafeSkies Conference held in October this year, some of these challenges have been touched on. Topics spoken about ranged from simple things such as the transition from steam gauges to glass panels, along with new air traffic management systems and devices such as ADS-B.

As these things become more and more integrated into the cockpit, we must better understand how to utilise them in a way that becomes more of a benefit than a distraction. Years ago, I lamented at the way we were slow in adopting things like EFBs. When OzRunways first came out it was (and still is) an amazing piece of kit, but we were still heavily focused on using paper to navigate. Without straying into the debate of electronic maps vs paper, I saw more and more freshly minted pilots staring at the iPad on their lap during their first hours of flying on their brand-new certificate. We have always been taught to look out the window as we are visual pilots and yet our teaching methods were such that we overlooked this emerging technology for quite some time and ignored it during our training. While many schools now address this, new technologies have the potential to introduce a raft of similar issues in future.

If we step outside of the cockpit for a moment and look at technology in a more general sense, we can see that it both adds value to our lives while potentially causing some hiccups along the way. Used properly it can make life much better but when used in flawed ways, the results can be equally flawed.

There is a great example of this when asking ChatGPT a simple question. The popular online chatbot is often used as a tool for speeding up workflows and sometimes for more nefarious purposes such as doing homework. The results must be used with caution, however, as it can sometimes return some, let's say, interesting responses:



How many times is the letter "r" in raspberry

The letter "r" appears twice in the word "raspberry."

This is a great example of technology that doesn't add a great deal of value, yet there is nothing inherently wrong with it when used correctly. Emerging tech in aircraft is no different. We must learn to adapt and adopt in the right way. Incorporating technology stands to improve our lives but we have to integrate it into the cockpit (and other aspects of our aircraft and flying) properly. Learning how to do this is the key to unlocking the full potential of these new gadgets and realising all of the safety benefits.

But, and this is an important but, we must change. The world is changing and if we resist it and refuse to change alongside it then we will be left behind. This not to say the way we do things today is fundamentally flawed or dangerous, just that we can do better if we keep an open mind. And who doesn't want to do better right?

So, if we adopt new technologies then let's adopt it properly. Take the time to understand and implement it in a way that actually delivers. There's a whole lot of upside to these new trends, but only if we use them appropriately.

912iS
MICHAEL SMITH
Southern Sun

MICHAEL SMITH:

VOYAGE OF THE SOUTHERN SUN

Words & Images **Michael Smith**

On the 12th April 2015, it was a calm Melbourne spring morning as I quietly said goodbye to my family for "a few months," bound for London. There was no fanfare – it was to be a personal journey – just me and my little amphibious Flying Boat, Southern Sun. She is a "Searey", a two-seat single engine plane, that can land on runways or water, a modern plane built in the style of the old flying boats of the pre-war era. There are around 500 flying around the world, produced by the Progressive Aerodyne company in Florida, with most home built from their kit, but now available as a factory LSA (searey.com). Southern Sun was specially built for me by the owner of the company with this trip in mind.

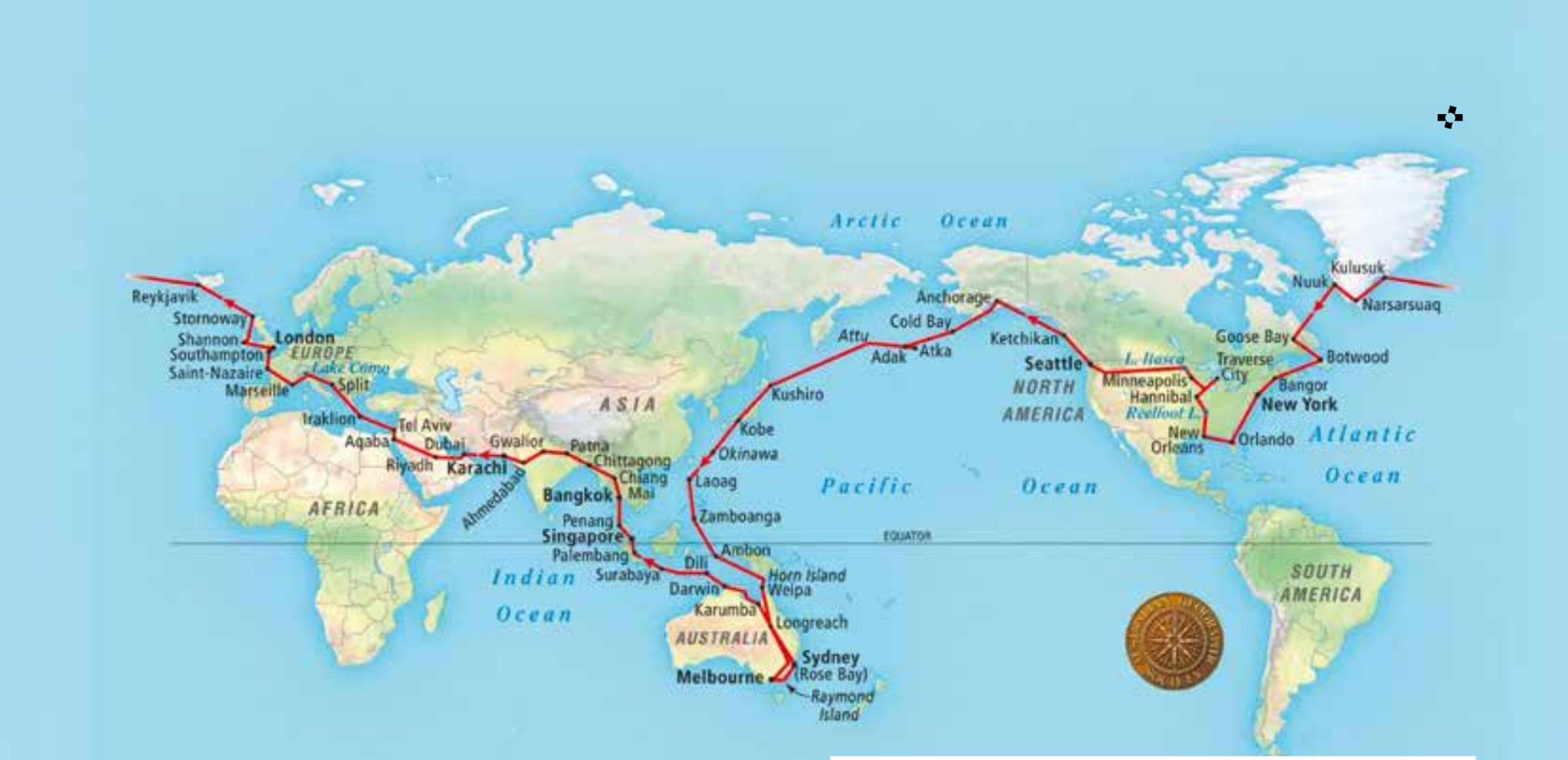
I had spent the better part of 10 years researching the late 1930s Qantas Empire Imperial flying boat route from Sydney through to Southampton, England; via Asia, India, the Middle East and Europe. That was the Golden Age of flying, luxurious and romantic, I wished I could have done the trip back in 1938, but I was born 30 years too late. So I did the next best thing and planned to retrace the route in the Southern Sun which has 13 hours worth of fuel tanks built in, and up to 21 hours range in maximum ferry mode, utilising a large fuel bag on the passenger seat.

My planned route closely followed the 1930s cities, making changes mainly for political reasons; for example refuelling was once done on Lake Basra in Iraq, but permission to land there for this journey was denied. The path ended up being Melbourne – Sydney – Longreach – Karumba – Groote Eyelandt – Darwin – Timor – Indonesia – Singapore – Penang, Malaysia – Thailand – (Over Myanmar) – Bangladesh – Patna, Gwalior & Ahmedabad, India – Pakistan – Dubai – Abu Dhabi – Saudi Arabia – Aqaba, Jordan – Israel – Crete – Croatia – Italy – Marseille & St. Nazaire, France – Southampton & London, England.

The plan wasn't just to fly the route, but to explore each of the cities on my journey. To seek out not just the landing spots of the old route, but the hotels where guests used to overnight on that romantic journey – 10 days from Sydney to London, staying at the world's most luxurious hotels along the way. I would stay two or three days in each place exploring.

Having crossed Australia, landing at Darwin airport was my first ever operation at an international airport, and I was nervous. I had spent most of my years flying at uncontrolled fields and waterways, so mixing it with Boeings was all new to me, but something I was going to have to get used to. Where I could, I landed at

At Lake Como I was able to have customs/immigration meet me lake-side.


Arctic Ocean
Reykjavik
Stornoway
Shannon
London
Southampton
EUROPE
Lake Como
Saint-Nazaire
Marseille
Split
Iraklion
Tel Aviv
Aqaba
Dubai
Gwalior
Patna
Riyadh
Karachi
Chittagong
Chiang Mai
Bangkok
ASIA
AFRICA
Ahmedabad
Penang
Singapore
Palembang
Surabaya
Indian Ocean
Dili
Darwin
Karumba
AUSTRALIA
Melbourne
Sydney (Rose Bay)
Raymond Island
Longreach
Horn Island
Weipa
Ambon
Zamboanga
Laoag
Okinawa
Kobe
Kushiro
Attu
Adak
Atka
Cold Bay
Anchorage
Pacific Ocean
EQUATOR
Ketchikan
Seattle
NORTH AMERICA
L. Itasca
Minneapolis
Hannibal
Reelfoot L.
New Orleans
Orlando
Traverse City
Goose Bay
Botwood
Bangor
New York
Atlantic Ocean
Nuuk
Kulusuk
Narsarsuaq
SOUTH AMERICA

> **A stop at Lake Como was not part of the original flying boat route, they stopped in Brindisi and Rome in Italy, but how could I pass up the chance to land on Lake Como and be met lakeside by Italian Immigration.**

secondary airports with international flight capabilities, but there were times, like at Dubai International, where I saw no less than 8 widebody passenger jets lining up waiting for me to land. I was also getting used to hearing "you'll be number 2 to the Airbus."

As nearly all of my flights were crossing international boundaries, I mostly needed to land at the major airports to clear customs and immigration. At Lake Como in Italy though, I was able to have customs/ immigration meet me lake-side.

My first international landing was in Dili, Timor-Leste. The locals in Timor thought my little plane was kind of hilarious! They'd never seen such a small plane.

On crossing the equator between Indonesia and Singapore I was nerdily excited by my first equatorial crossing to see the GPS click over from S to N in the air. Then, as someone who had grown up sailing I turned back south to land on the ocean and taxi across the imaginary line as a boat. Buono!

The plan wasn't just to fly the route, but to explore each of the cities on my journey.

But then I'd had this other idea and question gnawing away at me…

If the water goes down the sink clockwise in the northern hemisphere and anti-clockwise in Australia, what happens on the equator? So, I bought a plastic laundry tub and cut a drain hole in the centre bottom. Upon landing I took advantage of the Searey's magnificent sliding window, leant out, filled my "sink" with water and lifted it up. Voila! No turning effect at all – the water just slowly went straight down. Thank goodness I never have to wonder about that again…

Flying around the tropics was tough work in a small slow plane, but I always flight planned with 3 hours spare fuel, which gave great peace of mind when flying around lots of afternoon weather systems.

I had planned to fly between 5 to 8 hours a day, with departures at 7am to try to avoid the worst of the afternoon daily rain. Being April I was at the tail end of the season. This cleared up as I passed over to the Indian region, but then we had some serious heat to deal with. By mid-morning the temperatures were regularly reaching the mid 30s and by lunchtime low 40s.

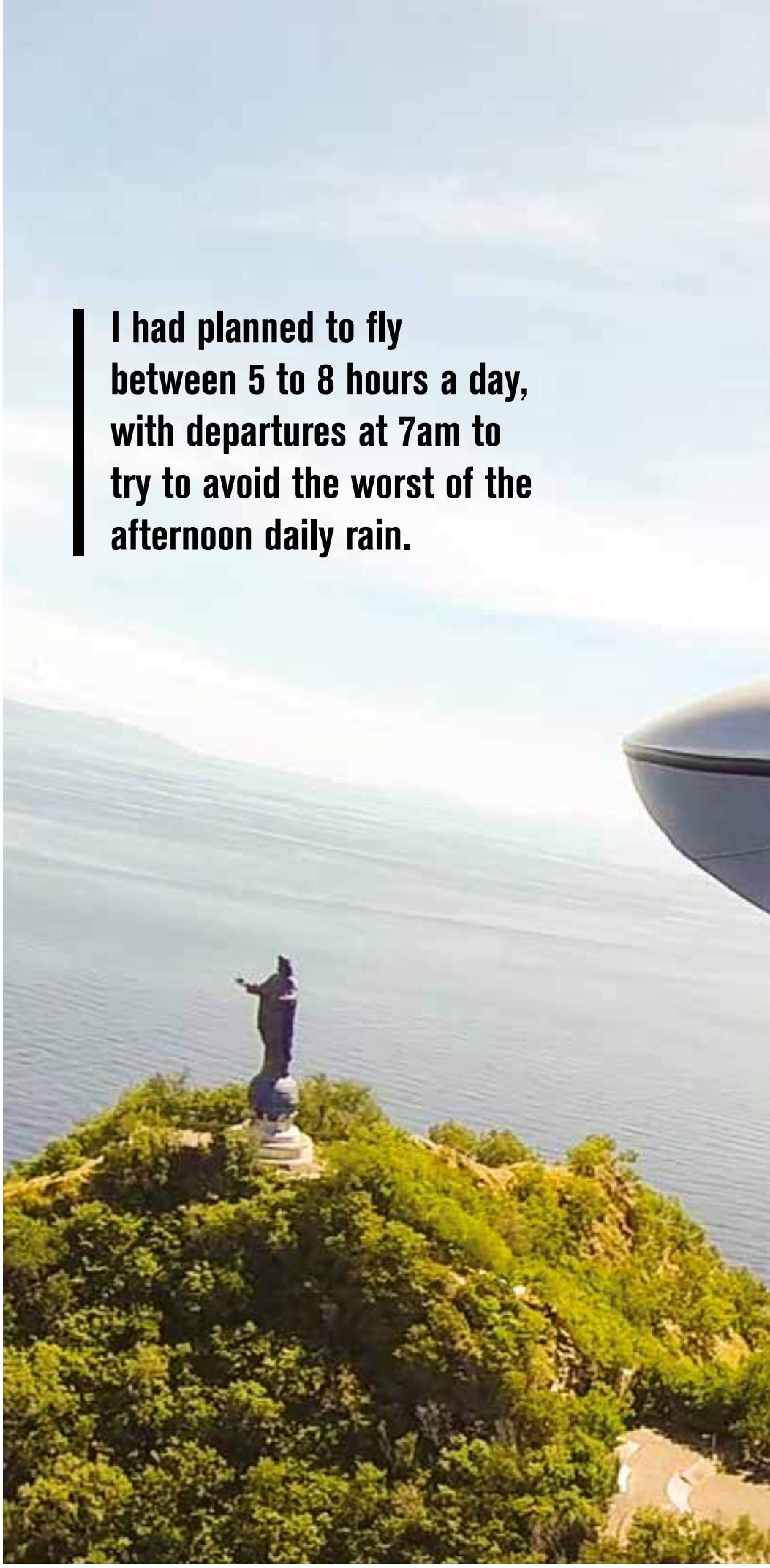
When I landed in Saudi Arabia I saw 53 degrees on my OAT (outside air temperature) – luckily I was descending at this point... But when I was at 100' above the runway and ATC were surprised to see that "I wasn't a helicopter" they made me do a go around and boy, did those temps skyrocket... As annoying as this was, it was also a godsend – it made me realise how hard it would be to take off with 12 hours of fuel in this heat. It occurred to me after a day or so, that the best thing to do was leave at 10pm at night when it was 20 degrees cooler. It was a long, lonely night flying over the desert, with just a few lights and stars to keep me company through the evening until I reached Aqaba, Jordan in the morning.

Once through the Middle East, a felt a huge sigh of relief...

The knowledge that Southern Sun uses the same Rotax 914 petrol engine in pusher mode as a Predator Drone certainly had me wondering about my sound signature, more than once nervously pondering "I wonder what call I make if someone starts shooting at me?". From Dubai, to Saudi then Jordan, I then stopped in Israel for five days to visit Haifa, Tel Aviv and Jerusalem. My long-winded security clearance was generously arranged by Yigal from AOPA Israel.

Most of the paperwork for the trip was handled by a specialist agent in the UK, and while there was a year of planning in the paperwork, it all went smoothly. There was a plethora of paperwork at each port, usually requiring multiple rubber stamps and signatures, but I used ground handlers in each country which made this much easier. They were all very jovial and happy to see Southern Sun, and not once did I feel taken advantage of or asked to pay any cash on the side.

> **I had planned to fly between 5 to 8 hours a day, with departures at 7am to try to avoid the worst of the afternoon daily rain.**



By midmorning the temperatures were regularly reaching the mid 30s and by lunchtime low 40s.

Some of the many incredible photos and memorable experiences from Michael's trip.

One of the greatest discoveries of my trip was the fabulous generosity of strangers. No matter where in the world I went, and how supposedly hostile our governments may have been toward each other, the people on the ground went out of their way to be helpful, giving up time and hospitality for the "perhaps crazy" guy who had turned up in this little plane that looks like a boat...

A stop at Lake Como was not part of the original flying boat route, they stopped in Brindisi and Rome in Italy, but how could I pass up the chance to land on Lake Como and visit the Aero Club di Como – Bellissimo! My wife flew in from Australia (commercially...) and met me there for a week-long break.

From here it was all getting close to the end and easier flying. While my entire trip was VFR, through Asia and the Middle East I had been controlled along airways like a commercial IFR flight, but from Italy onwards, once cleared from controlled airspace it was much like flying in the US or Australia. Finally, after crossing France and a quick splash'n'go on the Loire River, I departed for Southampton Water, where I had been given permission to do a touch and go on the water before proceeding to Southampton International to clear customs and immigration. Later that day I flew over the Thames and into Daymans Hall, a lovely grass airfield on the eastern outskirts of London. The flying club looked after me very well.

Well... there I was. Trip over. Wow, I made it. My wife had joined me again, and we had a few weeks' break planned in the UK. I had to work out how to pack up the plane and send it home. After only a few days of discussion, with my quiet yearning to keep going, and my wife saying "you've been talking about a circumnavigation all your life, so why not keep going." Oh, ok!

Having spent 10 years planning to fly to London, I now arranged to fly to the US. Southern Sun would follow the Flying Boat route where possible, from Southampton to Foynes, Ireland and Botwood, Canada en route to New York.

But range limitations would mean including Iceland and Greenland in the route! I really had a pretty good run with great weather over Greenland. I had some delays in Ireland due to low cloud, then a couple of hours at a few hundred feet over the ocean approaching Iceland to remain clear of cloud, but none of it scary. There was one incident involving fog and low cloud on the coast of Canada, that lasted only a few minutes, but

Iceland and Greenland were spectacular beyond words.

> **One of the greatest discoveries of my trip was the fabulous generosity of strangers. No matter where in the world I went, and how supposedly hostile our governments may have been toward each other, the people on the ground went out of their way to be helpful.**

did scare the living daylights out of me. Iceland and Greenland were spectacular beyond words, while Ireland is both the greenest and friendliest place on the planet.

After clearing customs and immigration in Bangor, Maine I jumped down the coast to New York, where I excitedly landed at Port Washington, Long Island, right where Pan Am and Imperial once landed having crossed the Atlantic. I “had” to fly the Hudson, and having seen the Statue of Liberty, Manhattan and flown over the aircraft carrier Intrepid, I dropped down for a water landing splash’n’go on the Hudson River. Gold!

After a few days in New York I planned for my longest leg of the trip so far – a non-stop flight from New York to the Searey aeroplane factory in Orlando, Florida. A magical flight, tracking coastal all the way, not only did I get to enjoy the myriad of coastal waterways but I heard the broad range of accents changing from North to South throughout the day – fascinating!

Annual maintenance and a few upgrades were made to the plane while at the factory, while I worked on plans to get back home to Australia. The route could not go via Hawaii due to range, so we would need to go up to Alaska, follow the Aleutians to Russia, then Japan, Philippines and Indonesia back to Australia. A long way around. All achievable, except Russian clearances were proving difficult. When I got to Seattle, I’d make a final decision – keep going, or pack the plane into a container and ship her home.

Having spent so much of my trip under the control of Air Traffic Control and following my expansive excel spreadsheet of destinations with set dates for clearances, the chance to fly across the US with only a loose plan was very enticing. I decided I was going to follow the entire length of the Mississippi; all the way from New Orleans up to its source at Lake Itaska. It was heaven.

But now I needed to get my skates on, for as I hear so many folks say these days, ‘Winter is coming’, and that’s no time to be in Alaska let alone out in the Aleutians... I did a mighty 12-hour non-stop flight from Minnesota to Washington, then the next day a short flight up to Seattle where I stayed a few days. Then I pushed on...

Jumping over Canada straight to Ketchikan, Alaska – then to Anchorage for a few days of final preparations. On leaving westwards for Cold Bay, I soon had to divert to Homer where I found a wall of cloud to the sea en route. My initial instinct was to fly along the cloud looking for a break, then I reminded myself that I really want to be at my sons 21st (he was 19 at the time) so I landed to wait for some clearer/safer flying. The next day it was lovely as I tracked to Cold Bay, where I then got stuck for 3 dreary days, before making the leap all the way to Adak. Where I spent the next 3 weeks!

There was plenty of nice weather in this time, but I was still waiting for Russian and Japanese permission. After a week it wasn’t looking good, so I had to come up with a plan B. What did I have to work with? Could I get straight to Japan? No, it would take 22 hours, at around 1800 miles, and I could only carry just on 21 hours of fuel.

But there was one option other than returning to the mainland and booking a shipping container...

Attu. The last of the Aleutian Islands. The most westerly point of the US. Not quite directly on the way, but if I could refuel at Attu, that would break the leg into a 6 hour and an 18 hour flight to get me to Japan.

But Attu is abandoned; no people, no power, no water, let alone fuel – just big rats and lots of them. Google Earth suggested the runway was still there and in OK condition. I decided I could ferry 6 hours of fuel in fuel cans, leave it by the runway, fly back to Adak, wait for the next weather window, then make one really big passage to Japan.

We flew out at dawn, with 6 fuel containers on the passenger seat and footwell, and 5.5 hours later arrived overhead a wet and rainy Attu.

I could see that 2/3 of the cross runway into the wind was usable, and the full length of the main runway was ok.

The opportunity to fly across the US with just a loose plan felt incredibly liberating.

Despite there being no one to listen I made my radio calls, then landed, left the fuel in a small shed by the runway, disturbed lots of rats and took off again to make it back to Adak before sunset. So far so good.

A week later the weather was looking good again. The freezing level was down to 2500', and with so much moisture in the air ice was forming quickly, so I decided to just stick at 1500'. The plan was to leave Adak during the day, arrive at Attu, refuel, then take off just before sunset and fly all night; in the dark for 15-16 hours and arrive into Japan in daylight, after 18 hours non stop and 23 hours flying for the day... what could go wrong?

Well, let's just say I'm here today to write about it, so while it was a very tough flight, it all worked out ok.

I needed a few days rest once in Japan, and the weather continued to be difficult on the way home, but I made it to Japan in a week, then on to the Philippines over a few days then a pit-stop in Ambon, Indonesia before making it back to Australia. Feeling very pleased to be reunited with my family, and chuffed to have been aboard the Southern Sun – she had become the first Flying Boat and/or Amphibian to complete a solo circumnavigation.

Southern Sun, standing by.

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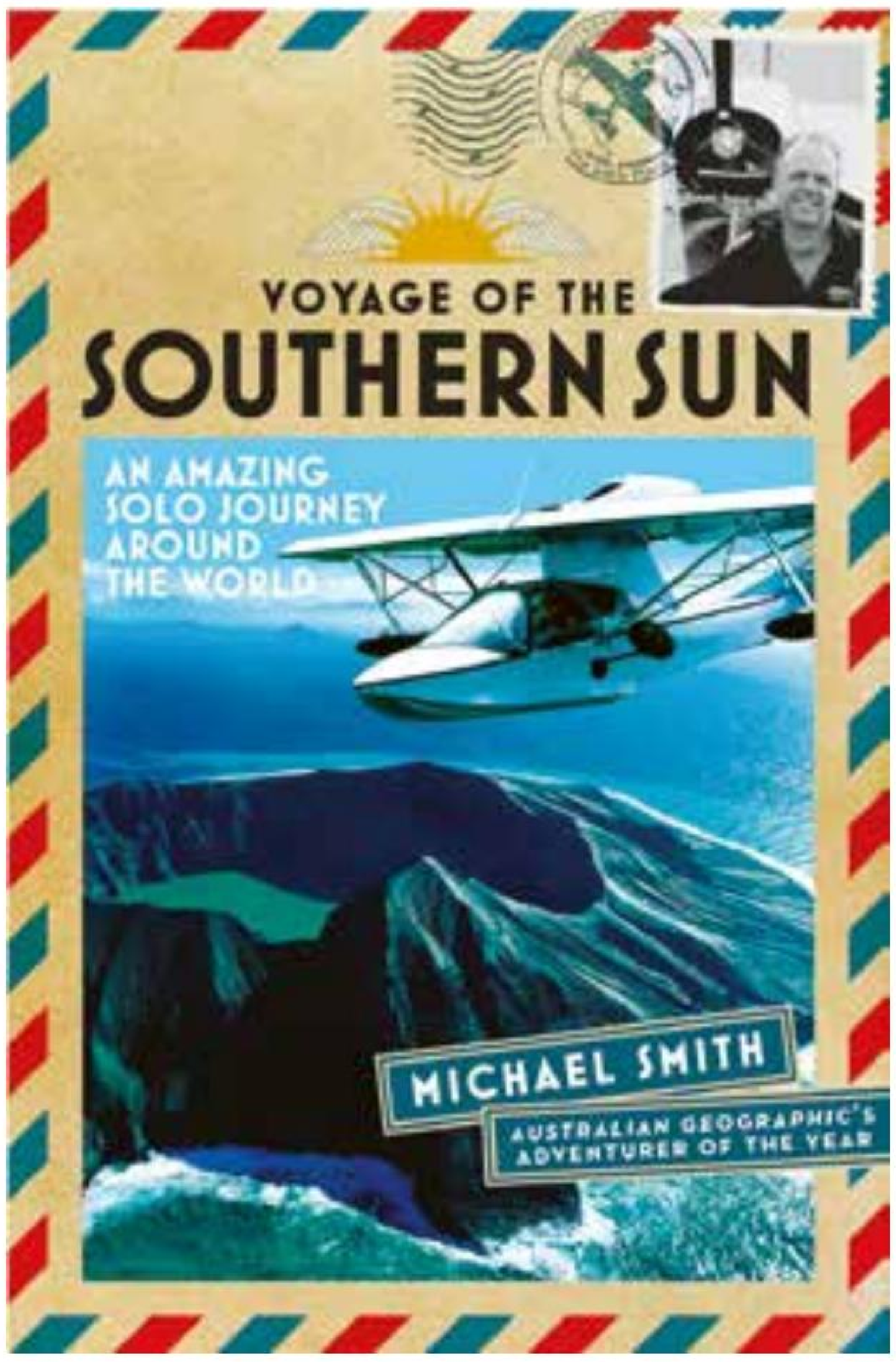
Since completing his original journey, Michael has received widespread recognition, including being named Australian Geographic Adventurer of the Year. But his thirst for adventure didn't stop there. In 2019, to commemorate the 100th anniversary of the first flight from London to Darwin, Michael retraced that historic route in his SeaBear L-72. This journey was not only a tribute to the pioneering aviators of the past but also a personal achievement, as he navigated the same challenging path a century later – using modern technology while honouring aviation history.

More recently, in April and May of 2024, Michael flew around Australia to mark another significant historical milestone – the centenary of the first aerial circumnavigation of the country in 1924. This pioneering journey, piloted by Wing Commander James Goble and Flight Lieutenant McIntyre, was conducted under the auspices of the Royal Australian Air Force in a Fairey Mk III D Seaplane. Michael set out from Point Cook and flew counterclockwise around Australia, completing the journey in 44 days with 27 stops. While he made every effort to follow the original route and timing, he did face his share of weather challenges altering his course slightly. One planned deviation, however, was to fly into the Gulf of Carpentaria, allowing him to take in the breathtaking coastline along the Queensland-Northern Territory border.

After speaking with Michael recently, it's clear that he has a deep connection to aviation milestones, always seeking ways to honour them. With 2025 marking the 10-year anniversary of his original global journey, I asked if he had any plans to celebrate it. He responded saying, "I'm not sure yet, but I definitely want to do something. I'm still figuring out the details... Of course, what better way to celebrate than with another adventure!"


VOYAGE OF THE
SOUTHERN SUN
AN AMAZING SOLO JOURNEY AROUND THE WORLD
MICHAEL SMITH
AUSTRALIAN GEOGRAPHIC'S ADVENTURER OF THE YEAR

For those eager to learn more about Michael's incredible circumnavigation, we highly recommend his book and documentary Voyage of the Southern Sun, where he provides a full account of the adventure available on his website.

Scan the QR code to read the full article.

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THE PROBLEM WITH COMMUNICATION

NEIL SCHAEFER

Head of Training Development

Neil Schaefer has been involved in General and Sport Aviation for over 45 years. A qualified instructor, examiner, accident investigator, auditor and SAFA Senior Safety Officer, Neil has had a vast range of experience in the aviation world. Currently serving as the Head of Training Development, Neil previously spent 4 years running an RAAus flight school and worked 7 years as Assistant Operations Manager at RAAus.

neil.schaefer@raaus.com.au

George Bernard Shaw, writer and political activist said it best, "The problem with communication is the illusion that it's actually occurred". I want to address this idiom from three distinctly different angles: training delivery; airband radio communication; and RAAus communications with its members and authority holders.

The relevance of this statement rang true last weekend while instructing at my local field. The standard call on entering and line up was made with the intention of circuits clearly articulated and acknowledged by other nearby aircraft. Moments later, a further enquiry from another pilot came through "Aircraft xxxx- "where abouts in circuit are you now?" A polite acknowledgement was made with callsign and "turning downwind two -eight and remaining in circuit". This occurred twice more before final, with other cued calls having to be repeated by others in the circuit area.

SEEING IS BELIEVING

Firstly, radio should never be seen as the only way to ensure effective situational awareness in "See and Avoid" practices. STOP just for a second and ask yourself–will it make it easier for other pilots or just add to the clutter? Practice active listening and stretching your situational picture by focusing on other transmissions. This is a skill which requires discipline but will ultimately make you safer with the added benefit of reducing the unnecessary chat or extra information that just clogs up the airwaves. Radio can be an extremely valuable tool to aid situational awareness, but pilots need to be aware of the traps of transmission and the benefits of an effective listening watch (CASR 91.630). At many aerodromes where radio carriage is not required, there can be aircraft including paragliders, powered parachutes and recreational aircraft that may be operating or transiting without radio. There is absolutely no substitute for effective lookout practices. Finally, even if the call is completely appropriate and clear, there is no guarantee that it has been received, or more importantly understood, and used by a fellow pilot to aid in their situational awareness.

"IF I'VE SAID IT ONCE I'VE SAID IT A THOUSAND TIMES!"

RAAus has had a key strategy in place for many years now – Engagement. Making sure members from affiliates to Chief Flying Instructors are being given timely relevant information that strengthens awareness and connection with members. Clearly, we can't be at every aerodrome, clubhouse or flight school all the time, but communications now take a vast array of forms. Aside from the reintroduction of SportPilot as a quality recreational aviation publication, our eNews platforms are at the forefront of electronic communications to members and are customised for our Instructors and Maintainers. Underpinning this are our professional and friendly staff, whether through our office contacts or directly with managers.

With all this you would think we would have comms covered. Well unfortunately not always! It's a jungle out there, right? Emails surrounded by spam, marketing, advertising and pointless social media platforms all create a saturation of white noise. The important information often slips through, and this is compounded by two key factors – our focus on relevant information is only activated when you actually need it, and you may not have time to find it when it really matters. All this adds to the illusion that information transmitted is information received, which is often not the case.

This manifests itself far more often than you may realise in the RAAus environment where important operational and technical information gets missed, some with actionable priorities. BFRs or ratings renewals due, aircraft registration, new Ops Bulletins, or service bulletins. This leads to one of my favourite questions when conducting assessments and renewals. Where would you find that bit of information? Knowing where to get it when you need it is as important as getting it in the first instance.

"TELL ME AND I FORGET - INVOLVE ME AND I'LL LEARN"

How we communicate is often far more important than what we actually say. Sometimes the best communication is nonverbal. Remember that first flight, handling the controls? I bet you have long forgotten the words the Instructor spoke, but will never forget how it made you feel. As Instructors we need to tap into the learning highway at the right end, and in the right way, at the right pace and with the awareness to know what is being absorbed and understood. Flying is such a visual activity, using visual cues to explain and demonstrate concepts is often far more effective than overloading the intercom with instruction. Often just three key words are all that is needed to add to the picture.

> **STOP just for a second and ask yourself – will it make it easier for other pilots or just add to the clutter?**

Conversely students and some pilots may find it hard to articulate and communicate their understanding. Being new to the unique aviation language and alphabet zoo of acronyms and even the concepts of flight, younger generations will assimilate information while older generations tend to associate with their individual experiences in life; but in either case, it's up to the Instructor to find the right pathways to both learning and understanding. This starts with effective communication.

So how can we stitch all this together? The key to effective communication is that the messages are understood, and to understand each other, we need to listen. Whether in the air, at the end of an email or in the classroom. On that note I'll leave the final words to Mr Shaw. "Progress is not possible without change, and those who cannot change their minds, cannot change anything".

A LONG WAY ROUND THE WORLD

Words **Nicholas Jones**

David is hoping to achieve over 200 knots in “The Beast”.

The Long-EZ is a tandem 2-seater designed by none other than the almighty Burt Rutan, which first flew in 1979 and was a very popular kit plane throughout the 1980s. The plane was really an evolution of the VariEze, an earlier slightly smaller tandem also designed by Burt Rutan. The Long-EZ has a canard layout, a swept wing with wingtip rudders, and a pusher engine and propeller. The main notable features of this design are incredible efficiency and speed. The Long-EZ’s unique canard configuration also enhances its stall resistance, allowing the forward wing to generate lift before the main wings. Given the canard will stall before the main wing, the canard drops and then starts flying again in a slow bobbing motion if back stick is maintained.

Recently I was fortunate enough to meet someone building such a plane. However, this is not your typical Long-EZ!

Tucked away in the corner of a hangar in Moorabbin is possibly one of the most interesting home-built aircraft I have come across. Dave Berenholtz, who originally got started in aviation by flying gliders, tells me “I spent most weekends driving hours to fly gliders and then make the long commute home again”. Even though that was decades ago, you could tell that the aviation bug hit him early and didn’t ever wane.

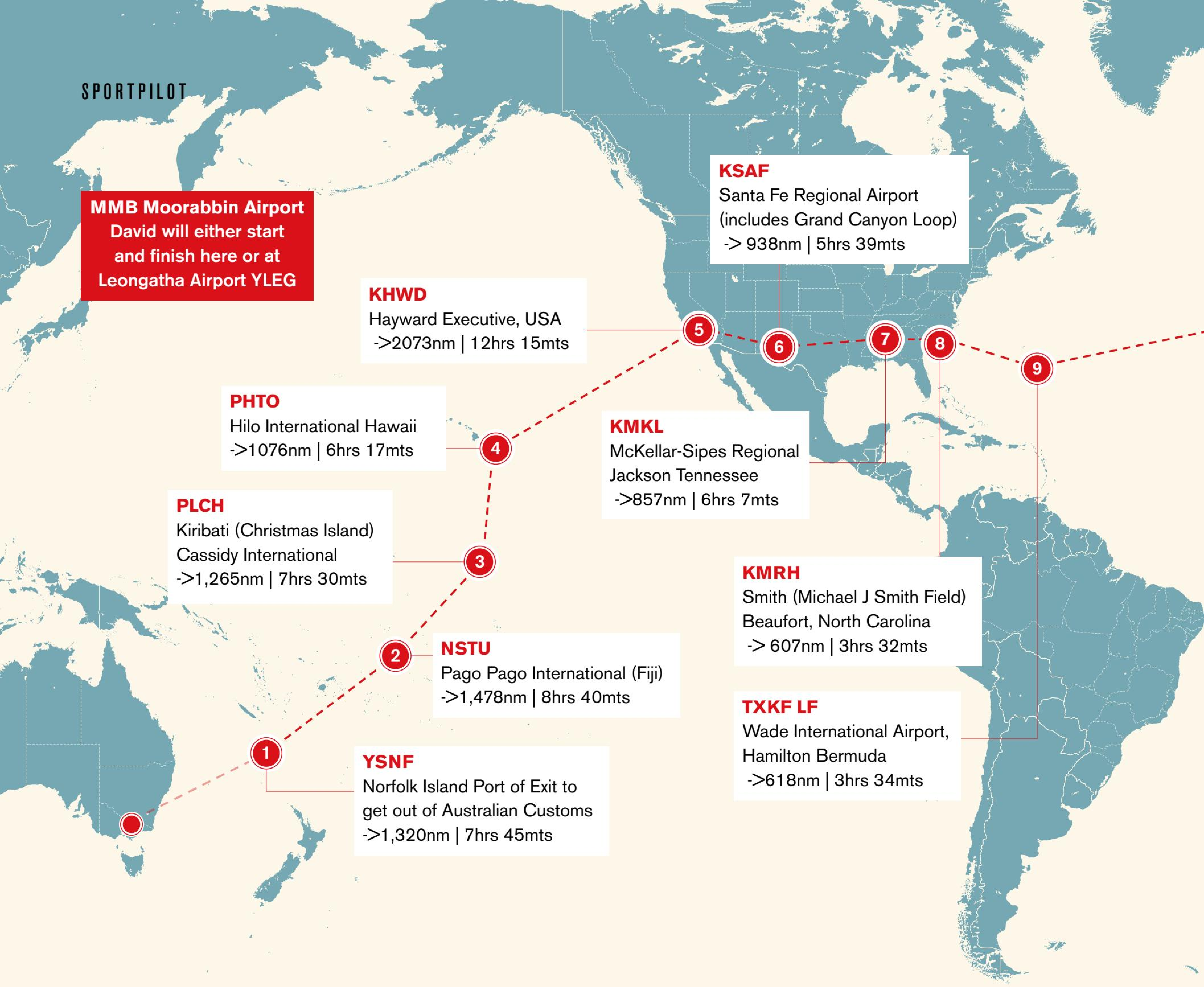
After flying gliders for a while, he eventually transitioned to Gyros based out of Lethbridge. That all changed when one day standing at the airfield, he saw a Long-EZ land. Instantly he was captivated and began chatting to the owner about the plane. After a short discussion the owner said “It’s for sale and you can buy it if you want.” Dave was not yet licensed to fly it. But that didn’t stop a purchase agreement with a little time included to allow the pursuit of a PPL for flying VH registered aircraft.

At some point after becoming certified and doing some trips in his new plane an idea started to form, which clearly had some momentum. The idea was to fly around the world, but there was one small catch!

The 'typical' specs for a Long-EZ	
Length	5.12 m
Wingspan	7.96 m
Height	2.40 m
	2 Seater – Tandem Layout
Empty weight	Typically around 365 kg
Max takeoff weight	600kg However, with some reinforcements made during the build process to the landing gear many builders have increased the MTOW – making it an interesting Group G Candidate
Fuel capacity	197 L
Powerplant	Usually the Lycoming O-235 – 115 hp
Maximum speed	Max Cruise 150–170 knots
Range	1,750 nmi

Dave wanted to build a new plane first, and of course he wanted to build a Long-EZ, which he would build fit for purpose and be modified exactly to his plans. His mission is to fly around the world eastbound... and then do it all over again westbound. When someone makes a claim like this, you would usually not believe them, but when you see how much time, energy and planning he has put on the line; I have no doubt that he will make it happen.

The Long-EZ is what many would call a traditional 'home built' as in you purchase the plans, not an off the shelf kit with all of the parts included. These plans usually include a list of construction materials – for you to go and buy of course – construction manuals and blueprints. Up until fairly recently this is how the



**MMB Moorabbin Airport
David will either start
and finish here or at
Leongatha Airport YLEG**

YSNF
Norfolk Island Port of Exit to
get out of Australian Customs
->1,320nm | 7hrs 45mts

NSTU
Pago Pago International (Fiji)
->1,478nm | 8hrs 40mts

PLCH
Kiribati (Christmas Island)
Cassidy International
->1,265nm | 7hrs 30mts

PHTO
Hilo International Hawaii
->1076nm | 6hrs 17mts

KHWD
Hayward Executive, USA
->2073nm | 12hrs 15mts

KSAF
Santa Fe Regional Airport
(includes Grand Canyon Loop)
-> 938nm | 5hrs 39mts

KMKL
McKellar-Sipes Regional
Jackson Tennessee
->857nm | 6hrs 7mts

KMRH
Smith (Michael J Smith Field)
Beaufort, North Carolina
-> 607nm | 3hrs 32mts

TXKF LF
Wade International Airport,
Hamilton Bermuda
->618nm | 3hrs 34mts

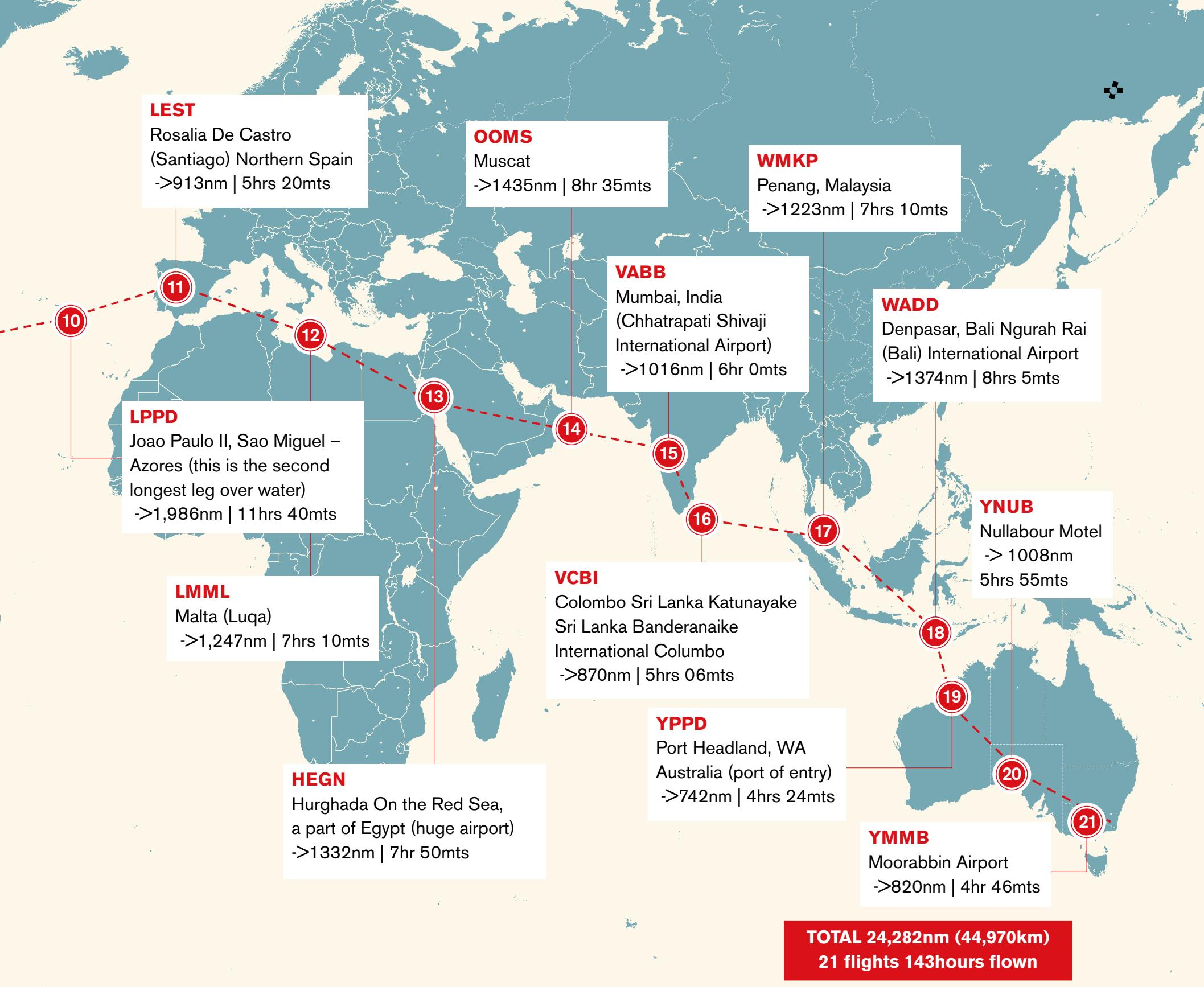
majority of kits were sold and because everything was constructed from scratch, you will never find two that are identical. This building process has also led to a culture of 'modification', with plane builders connecting with one another and sharing new ideas, build processes and resources. This is something that Dave has very much leaned into, with very few features not having at least some small upgrades or adjustments.

The original project began on December 1, 2011 and as of the time of writing, David has put over 16,000 hours of logbook-able time into the build, which is coming to its final days. By the time this article goes to print, Dave is hoping to have commenced his flight tests pending some diagnostic work with his new engine and some other final pieces of work.

So, what has Dave been up to over the past 13 years building this plane that makes this Long-EZ so unique?

> **Although it is a remarkable build, there has been no shortage of setbacks and challenges David has had to grind through. It is rare that you get to meet someone with such tenacity to persist with such a large project for 13 years.**

Let's go through it, but I cannot emphasise enough that this is just the 'highlight reel' of changes he has made.The engine is a Gladiator LIO-390 built by AC Aero with the designer based in Japan. It is a custom liquid-cooled engine built around a Lycoming O-360 core producing roughly 260 hp and weighing just 130 kg. It has also been de-tuned slightly so that it can run



LPPD
Joao Paulo II, Sao Miguel – Azores (this is the second longest leg over water)
->1,986nm | 11hrs 40mts

LEST
Rosalia De Castro (Santiago) Northern Spain
->913nm | 5hrs 20mts

LMML
Malta (Luqa)
->1,247nm | 7hrs 10mts

HEGN
Hurghada On the Red Sea, a part of Egypt (huge airport)
->1332nm | 7hr 50mts

OOMS
Muscat
->1435nm | 8hr 35mts

VABB
Mumbai, India (Chhatrapati Shivaji International Airport)
->1016nm | 6hr 0mts

VCBI
Colombo Sri Lanka Katunayake Sri Lanka Banderanaike International Columbo
->870nm | 5hrs 06mts

WMKP
Penang, Malaysia
->1223nm | 7hrs 10mts

WADD
Denpasar, Bali Ngurah Rai (Bali) International Airport
->1374nm | 8hrs 5mts

YPPD
Port Headland, WA Australia (port of entry)
->742nm | 4hrs 24mts

YNUB
Nullabour Motel
-> 1008nm
5hrs 55mts

YMMB
Moorabbin Airport
->820nm | 4hr 46mts

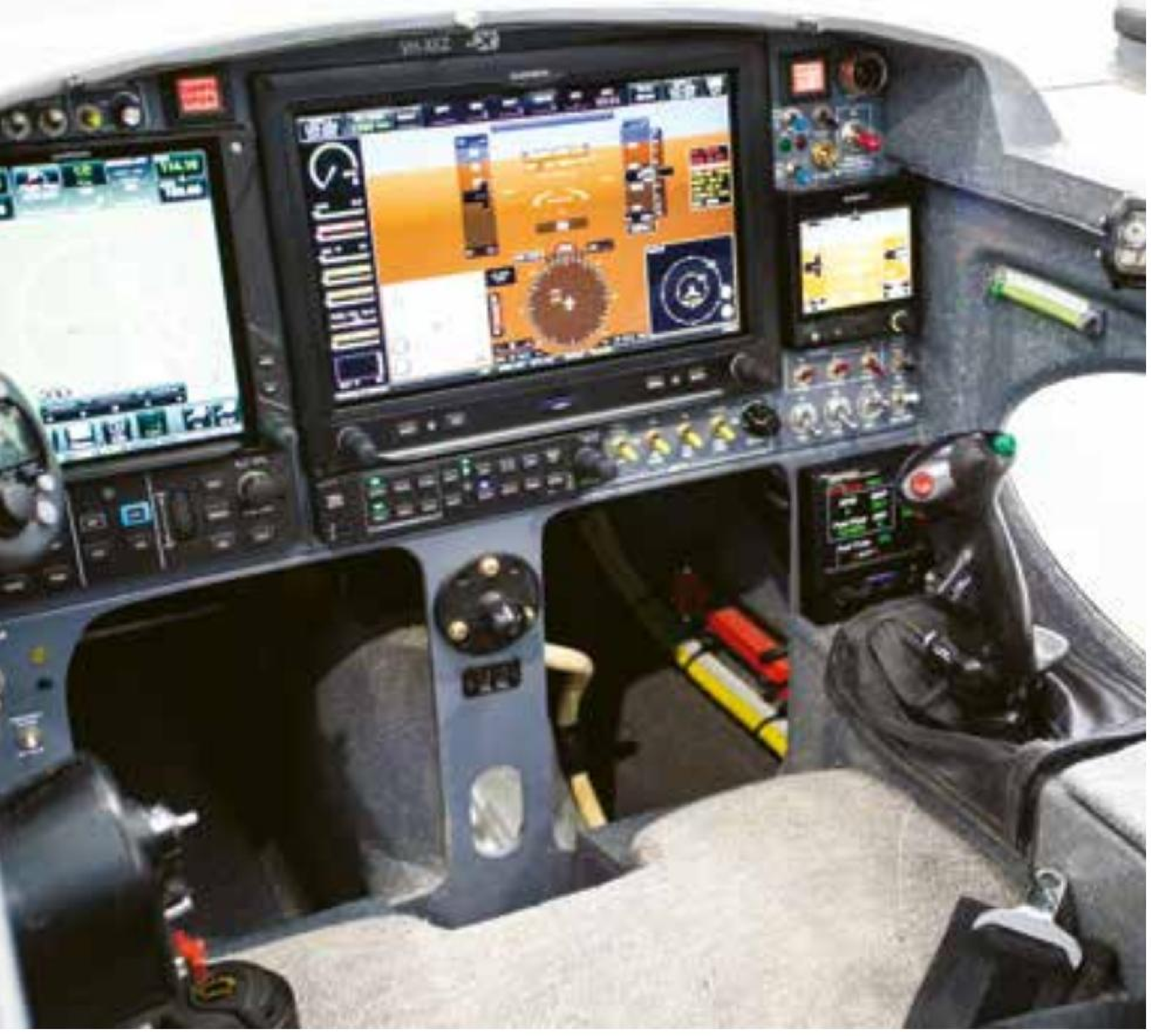
TOTAL 24,282nm (44,970km)
21 flights 143hours flown

on lower octane Mogas. AV-Gas can be notoriously difficult to get in certain locations and this feature alone will no doubt come in handy.

Underneath the plane Dave has installed a custom Ram Air Scoop which will add roughly 1 inch of manifold pressure to the engine in flight, further increasing the engine performance and efficiency. To cool this immense amount of power, inlet scoops under the wings have been added, with custom-built radiators all very tightly packed into the engine bay and plumbed together. With all of that packed under the cowling, Dave tells me he is hoping to achieve well north of 200 knots, however the exact VNE is yet to be confirmed during flight tests. It's no wonder that Dave has nicknamed his plane "The Beast"!

Inside the cockpit there is no shortage of electronics, the core of the dash is a Garmin GTN 750Xi, G3X Touch with a battery backed up G5 so the plane can be placed in the IFR category. A Garmin GFC 500 has been wired in for autopilot which Dave told me was an absolute must during the long legs of the trip, to which I agree. For radio there are two VHF and an HF with a 52 foot folded dipole built into the wings. A Garmin GMA 350HC intercom takes care of audio selection. And finally, a System32 EFII Electronic Engine Management Unit for engine monitoring and management.

With a spec sheet like that, it is probably fair to say that this looks like the dream cockpit. And it is, but it doesn't fully explain how much additional tech has been wired in. On both the throttle and the yoke, additional buttons have been added for extra features. The yoke already looked like it was from an F16 before the additional buttons but it just highlights how many small features have been packed in.



For example, one of the toggles on the joystick controls the direction of a large LED Headlight installed in the nose of the plane for taxiing and better vision at night.

Dave is expecting to be doing a reasonable amount of night flying as there are legs that are just not possible to achieve within daylight hours. So, one of the additional features that he chose to add in is a Max-Viz enhanced vision system subtly mounted to the nose of the plane. To view the camera, you just change the input feed on the Garmin G3X and it will show a black and white view of the horizon and below. Astronics say that they can be used to help see through fog and smoke however, the main benefit I have heard reported is on the ground when taxiing at night.

> **With a spec sheet like that, it is probably fair to say that this looks like the dream cockpit.**

Sitting in the cockpit is fairly comfortable for someone my size at roughly 5' 10", however, when you add an iPad, food and water, documents, a grab bag and a life vest I imagine things will get very snug. Especially when you consider that the back seat will be fully occupied by a fuel bag to extend the Long-EZ range out to over 2100 Nautical miles so that it can fly from Hawaii to California, USA.

Which brings up the question, where do you store all of your luggage for a trip so long? Well, baggage pods of course! This is actually one of the few things that was premade for this plane and is a common addition to the Long-EZ design. Even though they do technically add drag, they are very efficient for the amount of luggage they can hold. I was surprised to learn that Dave is only expecting to lose a few knots of air speed from this addition based on others that have made the same modification.

The specific route that Dave will take has been modified a number of times and conflicts such as the Russian-Ukraine War have made things tricky. Dave even tells me that certain drones had stolen the same canard design, so he was very eager to steer clear of the area. At the moment he is up to 'Route 11 –

Revision 1' but things may still change yet. Just the process to get through clearances and paperwork seems mind-boggling to me and is a key part to picking his flight path.

Dave explained the process of getting into the USA, a nation Australia is on good terms with and has no language barriers, but even then they require fingerprinting and a trip to the local embassy.

Although it is a remarkable build, there has been no shortage of setbacks and challenges Dave has had to grind through. It is rare that you get to meet someone with such tenacity to persist with such a large project for 13 years. It really is a testament to his determination and I will be eagerly following along for where this project goes.

If you are interested in learning more about "The Beast", David has meticulously logged the whole build on his website **alongwayroundtheworld.com** which I highly recommend having a read through.

Scan the QR code to learn more about "The Beast".

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BEAT THE HEAT
WHILST MASTERING THE SKIES

CHRIS WINDLE
Head of Safety

Chris has been with RAAus for 3 years, initially as the Audit Coordinator before taking on the role of Head of Safety. He has a Bachelor of Psychology, Diploma of Aviation and is currently completing a Master of Aviation Management. Chris holds a Commercial Pilot Licence and both RAAus and CASA Instructor Ratings.

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Ah, summer! The season when cockpits heat up, density altitude becomes your nemesis, and the allure of clear skies is almost irresistible. But before you dust off those trusty aviators and head to the airfield, let's talk about keeping your cool (literally and figuratively) in the Australian summer skies.

For many of us, the winter months have left our flying skills about as rusty as that old hangar door. Whether you've been grounded by winter weather or spring's mood swings, it's time to shake off the cobwebs and get back in the air. But hold on a moment – summer flying comes with its own set of challenges that would make even the most experienced pilot sweat.

First things first, let's talk about your pre-flight routine. We're talking about getting reacquainted with your aircraft. Dust off that Pilot Operating Handbook – you know, that book you might be tempted to use as a doorstop. Give it a good read, paying special attention to the sections that are crucial to know for when things don't go as planned. Consider it your summer reading, with a focus on being prepared for the unexpected.

Feeling a bit rusty? Don't worry, we've all been there. It's like riding a bike, except this bike navigates in three dimensions and requires a bit more finesse. This might be a good time to swallow your pride and book a flight with an instructor. Think of it as a chance to refresh your skills and gain some valuable insights.

Now, let's talk about the elephant in the cockpit – heat. Summer temperatures can soar, and that heat does funny things to both you and your aircraft. Your plane's performance on a hot day can be as unpredictable as a weather forecast. Density altitude becomes more than just a theoretical concept. It's a real consideration that can significantly affect your take-off and landing performance.

Speaking of surprises, summer weather can be fickle. One minute you're cruising through clear skies, the next you're navigating around a pop-up thunderstorm (we're looking at you, Hector). And let's not forget about bushfires. They can dramatically change visibility conditions and add an extra layer of complexity to your flight planning.

Dehydration is another summer challenge. It's amazing how quickly a cockpit can affect your hydration levels. Stay hydrated, folks. Your body will thank you, and so will your fellow pilots who won't have to decipher your parched radio calls.

Remember, there's wisdom in knowing when to postpone a flight. If conditions are beyond your comfort zone or exceed your aircraft's capabilities, it's a sign of good judgment to delay or cancel. Your decision-making skills are just as important as your flying skills.

Use the good weather to your advantage by practicing those ever-important emergency procedures. They're not just for ticking boxes during your flight review. Regular practice ensures that you're prepared to handle unexpected situations calmly and effectively. Your future self will thank you for the preparation.

Lastly, remember that the flying community is a fantastic resource. We're all in this together, sharing experiences, tips, and the occasional cautionary tale. Participate in fly-ins, safety seminars, or just hang out at the airport cafe. The insights you gain and the connections you make can be invaluable to your growth as a pilot.

> **Summer flying comes with its own set of challenges that would make even the most experienced pilot sweat.**

As Recreational Pilots, we have the privilege of experiencing breathtaking views from above. From vast inland landscapes to stunning coastlines, the sights are unbeatable. Just remember, the key to truly enjoying those views is ensuring you're well-prepared and making sound decisions.

So, as you embark on your summer flying adventures, keep your wits about you, your skills sharp, and your enthusiasm high. Stay curious, stay prepared, and always prioritise safety. Here's to a summer of safe flights, smooth landings, and unforgettable experiences in the skies we love. Happy flying, you magnificent aviators!

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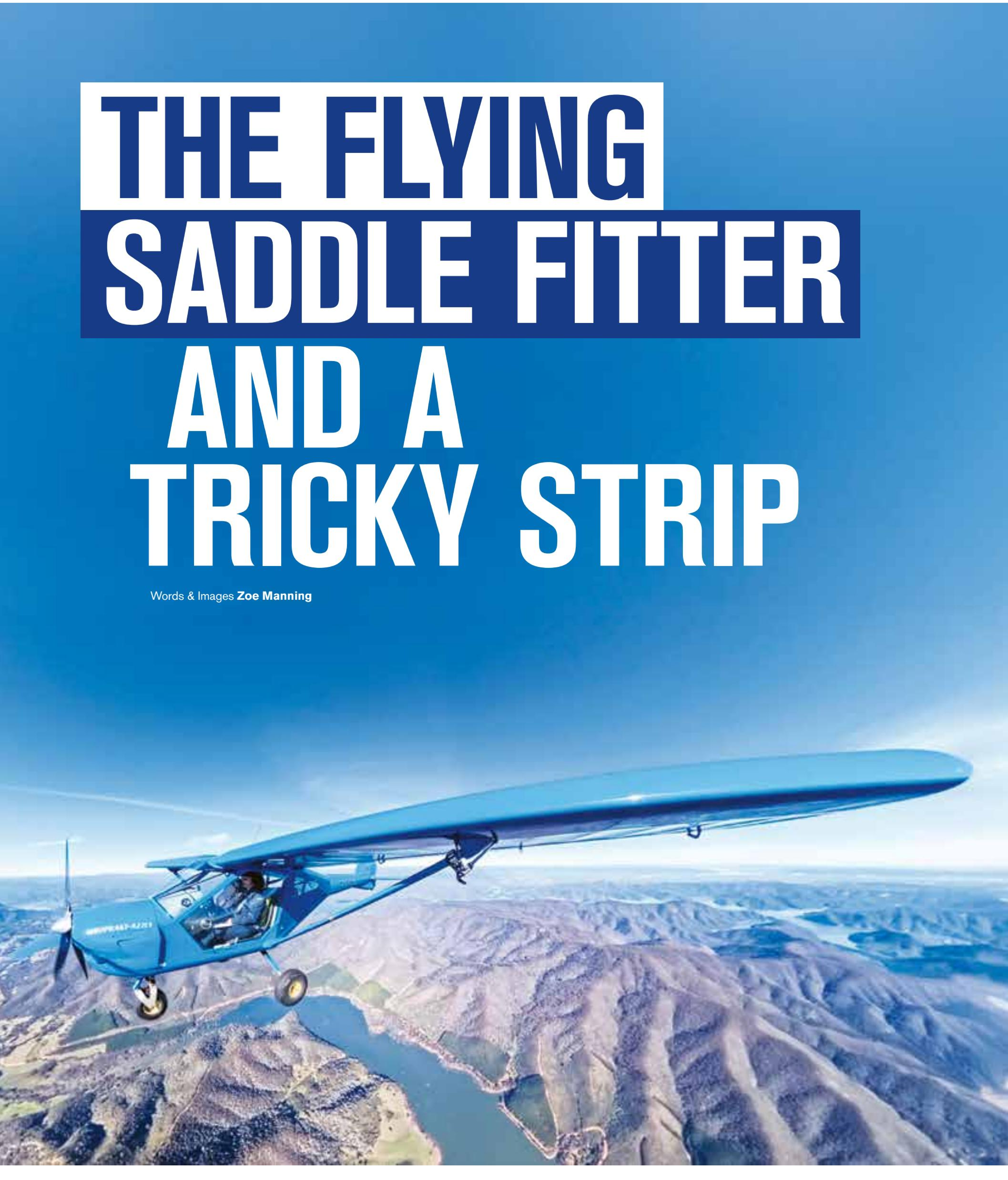
THE FLYING SADDLE FITTER AND A TRICKY STRIP

Words & Images **Zoe Manning**



Hi! My name is Zoe Manning and I'm a saddle fitter. That means I fit and adjust saddles for horses and their riders (yes that's really a thing!).

I'm also a pilot.

Recently I organised to do a saddle fitting trip, visiting clients around Echuca. Instead of driving from the Mornington Peninsula, I decided to fly 'Trixie', a little blue Foxbat. Trixie is a 2012 model Aeroprakt 22LS and has a MTOW of 600kg.

My first challenge was working out how many saddles I could fit in. My job requires me to take 'Demo' saddles as well as some tools and other equipment. Saddles are bulky things and weigh between 5-8kg each.

> **I've only been flying for 18 months, and although I've done many hours in the Foxbat, I'd never seen a strip like Beechworth before. It is 610 metres long and is located on top of an undulating grassy hill.**

Due to the awesome cockpit width and height of the Foxbat, I managed to fit four saddles on the passenger seat and three in the baggage compartment. With full fuel, tools and an overnight bag this left me a surplus weight availability of 60kg. I was very happy about that!

The morning before departure I checked the weather, and it couldn't have been better! I needed to touch down at Beechworth to pick up a saddle from a friend. So I planned for that, checking fuel requirements and NOTAMS.

I also rang the owner of the Beechworth strip, Robert Tully, to get permission to land and for a brief moment on the strip. He was very friendly and helpful, advising me that it would be best to land on the upsloping 14, as 32 has a downward slope. I jotted that down on my trip notes and revised the runway layout and circuit patterns. I set off at 10am into a glorious blue sky and a tailwind.

The leg to Beechworth was uneventful apart from the stunning scenery. Flying over Cardinia Reservoir, the Cathedral Ranges and Lake Eildon was just magical. I'd flown this route on the way to Mt Beauty several times, so I was quite at ease.

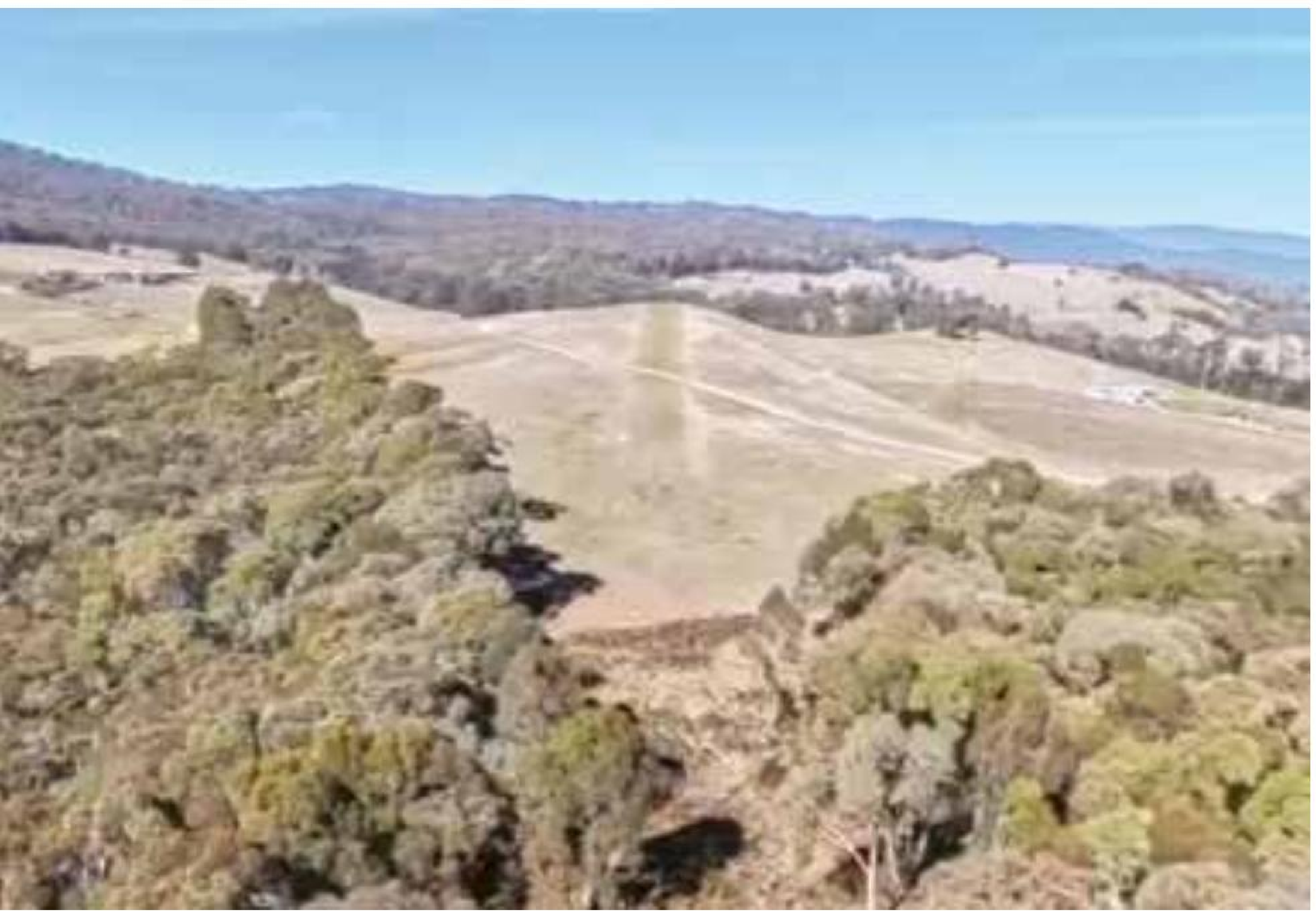
Then I arrived at Beechworth and everything changed...

As I approached the strip from the South West, it immediately became apparent that a landing here was going to be quite a challenge!

I've only been flying for 18 months, and although I've done many hours in the Foxbat, I'd never seen a strip like this before. It is 610 metres long and is located on top of an undulating grassy hill. There are tall trees on the threshold of 14 and a steep drop into a treed gully at the 32 end. The terrain surrounding the strip is undulating, dropping into the Wangaratta Valley to the West and rising to mountainous bushland to the South East.

I suddenly felt very underprepared. With adrenaline pumping I focused on the strip, my location, altitude and the circuit pattern.

Joining a midfield crosswind 14, I noticed the windsock indicating a light Westerly crosswind. If I landed on this runway as Robert had suggested, I would have a tailwind.



More relaxed with the rising terrain, this time I flew a lower and slower approach.

Just a low pass Zoe, just fly down the strip and have a closer look, ok? I turned base, then final. Hills everywhere, focus on the strip, we don't need to rush. I could feel my heart pounding.

Over the trees on the threshold, why do they feel so close? Too fast, too high, this strip feels VERY short. I couldn't take my eyes off the drop into the gully, looming at a fast rate at the end of the strip. Yikes! (I won't repeat the language I was actually using!)

Definitely not happy with that approach. I do NOT want to end up in the gully!

> **I feel like I gained a tremendous amount from this experience. Trust yourself and your training, take your time, always have a plan B and if it doesn't feel good then go around or don't land there at all!**

I powered up and went around. Sweating, I reminded myself to relax my grip on the controls. Turning a left crosswind, I noticed the terrain not far below. It really felt as though I wasn't climbing due to the mountain straight ahead of me. But thankful for Trixie's awesome climb rate I turned downwind with plenty of altitude.

How am I going to do this, I wondered? This strip is really difficult! I looked down at the windsock, runway 14 had a slight tailwind. I looked at the threshold of 32. Nice and clear on a naked hill with no trees. I made the decision to change runways. Changing direction, we took a left-hand turn and joined midfield crosswind for 32 to approach from the southern end, over the gully.

Taking a deep breath, I calmed myself down for another pass, this time on 32. I had to remind myself that I had plenty of fuel, and that I could go around as many times as I needed. And if I didn't find an approach that I was completely happy with, then I didn't have to land at all!

Focusing on the strip I concentrated on flying a controlled and accurate circuit. Zoe, remember your training, fly the aeroplane, establish a stable approach.

With adrenaline pumping I focused on the strip, my location, altitude and circuit pattern.

Talking myself through the circuit, I turned base, and for a moment I was distracted again. The mountain was looming in front of me, the trees were rising up, and I was still on base! I looked over at the strip, the terrain sloped down again, turning onto final, I followed the downslope to the threshold. A little high, a little fast, better, but not good enough.

So, just before touchdown I powered up again and went around. Feeling more confident, I again reminded myself to breathe and let go of my vice-like grip on the controls. Just fly the pattern. Be one with the aeroplane.

I turned crosswind, downwind and then onto base. More relaxed with the rising terrain, this time I flew a lower and slower approach. Focusing on the threshold, I ignored the gully beneath me. Over the threshold, power off, into the flare and the ground came up gently to meet us.

After the smooth float that is flight and the quietness of the flare, the rough, loud jolting of a grass strip on touchdown is always a shock. We nailed it! I stepped out of the aeroplane to find my hands were shaking and my knees were weak.

After a break at Beechworth and a catch up with my friend, I headed off to Echuca. Apart from nearly taking out a bird on the Echuca runway, the remainder of the trip was smooth flying.

The short grass strip at Echuca, which once intimidated me, was now a breeze compared to what I'd just accomplished at Beechworth!

My saddle fitting jobs went without hitch and I'm planning to go back in a few months' time. I might just stop in at Beechworth again to do some (tricky strip) circuit practice.

I feel like I gained a tremendous amount from this experience. Trust yourself and your training, take your time, always have a plan B and if it doesn't feel good then go around or don't land there at all!

And practice, practice, practice those circuits, short field, grass, obstacles and crosswind, in all conditions and configurations, within your capabilities!

If you'd like to check out some footage from the flight and possibly learn a little about Fitting Saddles, have a look at my YouTube Video.

Zoe is an RAAus pilot with around 300hrs flight time, most of these in her Foxbat 'Trixie' flying out of Tyabb YTYA Victoria.

ASHTON NELSON:

MEET AVIATOR ASH

FROM COCKPIT DREAMS TO YOUTUBE SCREENS – WE CAUGHT UP WITH ASHTON NELSON, AN ASPIRING PILOT

Words **Sophia Blakebrough** | Images **Ashton Nelson**

Ashton's passion for aviation has been lifelong.

Ashton has set his sights on becoming a commercial pilot.

Not many people can say they have more experience flying an aircraft than they have driving a car. With 10 hours of flight time already, Ashton Nelson is a member of this exclusive club at the age of 16. "I've got more hours in the air than I do on my learner's on the ground. It's amazing how little hours you have in the air but how significant that time and experience is," he said.

Ashton's passion for aviation has been lifelong, regularly tracking flights on Flightradar24 and listening to live Air Traffic Control transmissions. "When we'd fly on family holidays I'd always ask to go and see the pilots after the flight. It was a no-brainer to just have a go and see how I'd like it in a small plane," he said. Now Ashton has set his sights on becoming a commercial pilot, with the possibility of becoming a flight instructor or even a Check Captain one day.

Being in Year 10 at Christian College Geelong, he is already tailoring his school subjects to align with his aviation ambitions–and naturally, he takes any opportunity to incorporate aviation into his school learning. "At school I'm currently doing a landing gear mechanism that's activated by a server which can be initiated to go up and down," he said. Another school project involved a Cessna 172 crank box which would rotate a prop, so he is well and truly immersing himself in aviation at every turn.

He is already looking beyond school, having already attended open days at RMIT Point Cook and

researching cadetships with Rex and Qantas Pilot Academy. Once of his biggest role models is his uncle who is a captain for Qantas in a 787 and has been a key mentor, offering guidance on career pathways – although Ashton acknowledges not everyone is lucky enough to have such a resource. “I also want to help inspire people because I know when I started there wasn’t really much content. Especially on the RAAus experience and the RAAus pathway. I really enjoy making the videos, editing them and creating all of the content and I want to share my passion with other people.”

With around 500 followers, Ashton’s YouTube Channel *Aviator Ash* is his passion project, documenting every flight since his trial instructional flight at the age of 15.

> **“When you’re driving in a car there’s only a few things to think about, but when you’re in the air it adds a whole other different dimension.”**

His other videos cover interviews with other pilots, and everything from flight simulator reviews to handy educational content on the phonetic alphabet. “A large part of creating my YouTube channel was so I could share my experiences with friends and family,” he said. Ashton hopes to inspire the next generation of aviators. His advice to other young enthusiasts is simple: “Just get out there and give it a go. Stick with it, and it will be worth it.”

Ashton is grateful for the support he has received from his family to help pursue his passion. “My mum and dad drive me out to the airport for each lesson, waiting out there for a couple of hours, and film my take-offs and landings. I think they are very proud of what I’ve been doing.”

At the time of writing, Ashton’s next big goal is to complete his first solo flight, which makes him equal parts excited and nervous. “Everyone I’ve talked to says they remember their first solo, so I think it will definitely be a memorable event. I’ve been doing a lot of flight sim practice as the weather hasn’t been greatest and it’s not the cheapest exercise,” he said. “My instructor has been really supportive throughout the whole journey. He’s been great.” Ashton’s home airport is Lethbridge in Victoria where he flies one of the three Tecnam P92 Eaglets.

One of Ashton’s favourite things about flying is the surreal feeling and freedom of being up in the air. “You can do as much flight sim as you want at home, and I do, but in the air, you feel the forces, and the Gs and what your body is going through,” he said.

Landing, Ashton admits, has been the most challenging aspect of learning to fly, requiring precision and constant practice. “If you miss a week or two of flying, your proficiency drops quickly,” he said. “There’s a lot going on. When you’re driving in a car there’s only a few things to think about, but when you’re in the air

Ashton's home airport is Lethbridge in Victoria where he flies one of the three Tecnam P92 Eaglets.

it adds a whole other different dimension. You have to worry about your aircraft, all the different pressure and temp gauges. If you break down on the side of the road you can pull over, but in the air, you need to think about where you can be landing at any time if your engine cuts out."

In the lead up to his first solo, Ashton has been spending a lot of time practising on Microsoft Flight Simulator. "I can play around flying big commercial aircraft or practise realistically with the aircraft I'm actually flying in. I've designed Lethbridge Airport so I can fly out of there. It's been really helpful for my flight training to be able to use flight simulator as a tool because it's so accessible."

When Ashton is unable to fly, he is busy reading ahead of the course material in anticipation of his next lesson, practising his landings on Flight Simulator or making videos for his YouTube channel. And when he's not doing those things, he's working a part time job to help pay for more flight time in the air. Outside of flying, Ashton loves being outdoors, playing footy, stand up paddleboarding and surfing, but flying is no doubt his number one passion. "If flying was free, I would be up there every minute of every day."

> **"If flying was free, I would be up there every minute of every day."**

Looking to the future, Ashton is really excited to get his passenger endorsement so he can take his family and friends for a fly. "I'd love to take them around the local area, fly over their houses and share the world of aviation with those who have never flown in a small aircraft before. My parents come out to each flight but have never flown in a small Tecnam, so I think just being able to share it would be one of the first things I'd like to enjoy with them".

Follow Ashton's flying journey on his YouTube Channel.

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THE HIDDEN RISK OF PORTABLE DEVICES ONBOARD OUR RECREATIONAL AIRCRAFT

JARED SMITH

Head of Airworthiness and Maintenance

Jared Smith is Head of Airworthiness and Maintenance at RAAus. He holds a Graduate Certificate of Aviation, Bachelor of Technology (Aviation) and Business Management, a CPL, an instructor rating and L2 maintenance authority. Jared has been with RAAus for the past five years, initially working as the Assistant Technical Manager for three years.

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As pilots, we love the convenience that modern technology brings to the cockpit. iPads and iPhones are common sights in recreational aircraft, often doubling as navigation aids and flight planning tools. However, there's a growing concern that many of us may not be fully aware of—the risks associated with using portable electronic devices equipped with lithium-ion batteries in flight.

I recently attended the SafeSkies Conference, and one of the most striking discussions was about the potential dangers posed by lithium batteries onboard regular public transport and freight aircraft. While the focus there was on large-scale operations, it got me thinking about our own sport aviation environment. If airlines are addressing the risks of lithium-ion batteries so strongly, what about us in the smaller, more confined cockpits of recreational aircraft?

Let's start with a simple observation: have you ever noticed that airlines now make a point during their safety demonstrations to tell passengers to ask for assistance if their phone or device drops between the seats? It's not because they're worried you might accidentally elbow the person next to you, but because there is a very real risk that a lithium battery could be damaged if the device is crushed. This, in turn, can lead to something called thermal runaway, a chain reaction where the battery overheats and could catch fire. Has this happened before? Yes, many times, and even here at home onboard our Australian-based airlines. Now imagine this scenario in the cramped cockpit of a recreational aircraft.

Heat and Charging in Direct Sunlight: A Risk We Can't Ignore

Many pilots rely on their iPads or iPhones for navigation and situational awareness while flying, and often, these devices are exposed to direct sunlight for extended periods. Not only does this cause the device to overheat, but it also accelerates battery degradation. Charging these devices while they are already heating up from the sun further compounds the issue. Lithium-ion batteries are sensitive to both heat and charging stress, and in extreme cases, this combination could lead to overheating, swelling, or even a fire.

Imagine an iPhone overheating and catching fire while you're focused on landing. The consequences could be catastrophic.

Physical Damage: The Silent Risk

Let's not forget the physical damage our devices endure. In the confined space of a recreational aircraft cockpit, it's all too easy to accidentally sit on your iPad or drop your phone during a bumpy flight. Any unseen damage to the lithium battery inside these devices can create dangerous situations. Crushed or punctured batteries can leak flammable electrolyte or initiate thermal runaway without warning.

Mitigating the Risks

Fortunately, there are simple steps we can take to mitigate these risks:

1. **Avoid charging devices in direct sunlight** – If possible, charge your device before the flight.
2. **Monitor your device's temperature** – If it feels excessively hot, turn it off and store it safely.
3. **Protect your devices** – Use rugged, padded cases designed for aviation use, which can reduce the chance of physical damage if dropped.

As technology has now become an integral part of our flying experience, it's essential that we understand the risks associated with portable electronic devices. The SafeSkies Conference underscored the fact that these risks are real, and as pilots, we must take every precaution to ensure that our devices, meant to aid us, do not become a safety hazard.

By being mindful of how we use and store our devices, we can mitigate the risks and ensure that our technology remains a helpful companion rather than a dangerous liability. Safe flying!

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AMY SPICER:
KICKING DOWN DOORS

AMY SPICER'S RISE IN THE WORLD OF AVIATION

Words **Sophia Blakebrough** | Images **Amy Spicer**

Amy is determined to pave the way for young women in aviation.

Big Boy
5
1
2
7
3
4

Amy learned to do her pre-flight checks at a young age with photo cards.

Amy Spicer isn't your average 11-year-old. By the time she reached double digits she was already learning to fly, publishing her own magazine and rubbing shoulders with Red Bull Air Racing pilots – that's quite the resume. Amy is determined to pave the way for young women in aviation.

We caught up with Amy for an interview during her school holidays, and despite her initial shyness, it was clear that Amy is mature beyond her years and has a deep passion for flying. As I cast my mind back to when I was 11, I can't believe what she has managed to achieve in the very short time she has walked this earth.

Her fascination with planes began as a toddler, growing up under the flight path of Brisbane Airport. Today, Amy lives near Perth's Jandakot Airport, where she is steadily working towards her goal of a lifelong career in the skies. "It's hard when you have a 5 or 6-year-old daughter and she says 'this is what I want to do', to know whether it's a passing fad or interest," said her mother, Kylie. But Kylie was very supportive of her interests (having a tiny bit of experience in GA herself) and was able to expose Amy to some incredible flying experiences at a young age.

> **"As a parent, I was literally told that I was wasting my money,"**

Her first flying experience was in the passenger seat of a Foxbat at the age of 7 in Batemans Bay, New South Wales. Kylie had chosen this type of flying experience so that Amy could look out the side of the Perspex doors – she was so small, she could hardly see over the dashboard of the cockpit! Amy was having such a fabulous time, so much so that the pilot asked if she'd like a go at the controls, and they stayed up in the air well beyond the amount of time that Kylie had paid for. For her eighth birthday, Amy was keen to try gliding – the only setback was that Amy was still so small that she didn't weigh enough to meet requirements. But the Adelaide Soaring Club did everything they could to get her in that glider for her birthday. That meant adding special weight, modifying the seats and all sorts of things with the Safety Officer to make it happen. "They went above and beyond, it was just amazing," said Kylie. Instead of staying just one night in Adelaide, they stayed for an entire week where Amy tagged along on other flights, including high-level aerobatics. By the time Amy touched back down on the ground, she was asking to go again! "I was actually a lot more excited than I would have ever been scared, especially with the aerobatics, that was so much fun," said Amy.

From that moment on, Amy was hooked. Kylie started contacting flight schools; the aim was to find someone who would work with Amy to help keep her passion alive until such time that she could start regular flying lessons.

"As a parent, I was literally told that I was wasting my money," Kylie recalls, after being rejected by numerous flight schools. "We've had people laugh in our face. After the second or third rejection, most people would just give up. How many other families or girls

Girls
CAN FLY
ANYTHING

are giving up and walking away? We were told 'come back when you're older if she's still interested.'" It was disheartening for them both that nobody would give Amy a chance. "I was told 'you're too small... you're a girl... you can't do that... go and do ballet or netball,'" said Amy. The more rejections, the more determined they became. They started actively pursuing female instructors and female Head of Flight Operations at different companies. But with the support of her mother, Amy persisted. After knocking on 18 doors, they eventually found a mentor in Megan Gray, Head of Flying Operations at a small aviation company. Megan, having received a similar opportunity when she was young, took Amy under her wing, helping her navigate the world of aviation.

Amy started an age-appropriate and modified version of flight training with Megan in a Cessna 152. To fly, Amy needed to do her own pre-flight checks, but how does someone so young understand and remember such a complex process? Kylie photographed every step of Amy's pre-flight check, that way for future flights she had a simple prompt to help guide her around the plane at what she must look at. Very soon after and with a bit of practice, Amy no longer needed the photo prompts and she would do the pre-checks like any other adult pilot would. This kind of age-appropriate learning has allowed Amy to flourish and learn so much about flying.

Through this experience, however, Amy has also discovered the lack of representation of women in aviation. Amy was quite horrified to discover that only about 5% of pilots are female. It was an early lesson in percentages. She was told to imagine a line of 100 people and only 5 those are girls.

matthallracing.com
GIVES YOU WINGS

Amy enjoying a Red Bull Aerobatic Experience with Emma McDonald.

Amy's immediate response was, "but why aren't there more?!" And that's how *Girls Can Fly Anything* was born. This is the name of her self-produced magazine, designed as a platform to showcase the stories and achievements of female pilots. It's also a tool of inspiration to encourage more young females into the industry. Amy handles the majority of the magazine herself – from brainstorming ideas and conducting interviews to typing articles and dealing with the local printer, producing up to 350 copies per edition. "We get a lot of phone calls and emails, especially from parents calling us for help and guidance," says Kylie who is happy to help other parents navigate the pathways for their children in aviation.

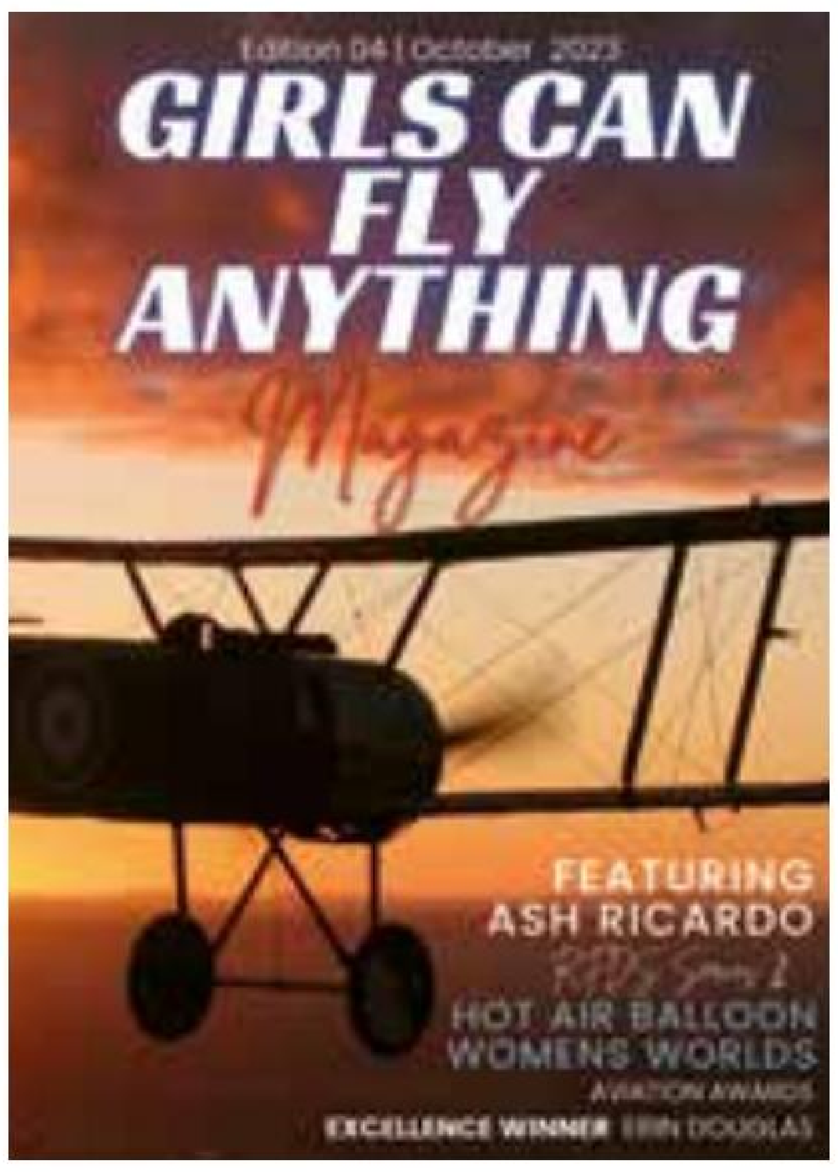
The magazine has opened up a plethora of opportunities and experiences for Amy, as she attends aviation events around the country and expands her little black book of aviation contacts. She has interviewed females from diverse backgrounds, from hot air balloon pilots, to wing walkers and aviation engineers. "Matt Hall always wants a copy for their coffee table," said Amy casually. One of Amy's biggest idols is Emma McDonald, who is Matt Hall's racing partner, full time pilot and Operations Manager at Matt Hall Racing. Emma is super enthusiastic about encouraging girls and has built a special rapport with Amy – so much so that Emma once redesigned her aerobatic flight sequence especially for Amy.

> **"I was told 'you're too small... you're a girl... you can't do that... go and do ballet or netball,'"**

Another of Amy's idols is Ash Ricardo. Whilst not technically a pilot, Ash is an actress and stars as one of the pilots in the Australia Drama *RFDS* which centres around the lives of workers for the Royal Flying Doctor Service. Amy's dream is to become an RFDS pilot and she regularly follows their aircraft around on Flightradar24. As Kylie put it, Amy "wants the dirty runways, the night flying and the rough weather". "To be a pilot helping retrieve a sick or injured patient would be a great team to be a part of," said Amy, as she looks forward to the future. Amy is taking her career goals seriously, having just started Year 7 at Melville Senior High School which offers Aviation Specialist programs. The school is just one of two in the country that have an MOU with Qantas Pilot Academy and has very competitive entry requirements. Year 7 and 8 students study aviation two hours a week and by Year 9 they are doing up to four hours of aviation in the classroom. "I'm currently learning helicopter aerodynamics and flying little drones through obstacle courses," said Amy.

Amazingly, their classroom teachers are also pilots and instructors themselves. Once students reach Year 9 and pre-solo age, they can leave the grounds with their teacher for a flying lesson at Jandakot Airport – now that's pretty cool!

Outside of school, flying and magazine commitments there isn't much time for other hobbies, but Amy has picked up swimming as a way to decompress from her busy lifestyle. "When I'm swimming, I can turn my brain off and I can't think about the rest of the world," said Amy. Having spoken to those in the AeroMed industry, Amy knows this will be an important skill for her career. Amy has also tried Aerial Yoga at a circus school to help her with situational awareness in case she wants to pursue aerobatic flying. So even when Amy is doing things 'for fun' they are still strategic pursuits to help prepare her for a career in flying. Amy's one piece of advice to other young girls is "don't listen to the 'no' people". And if you've read this far, make sure you share Amy's story with another female in your life – a daughter, a niece, or a granddaughter – as it might just be the inspiration they need to kick down their own doors and start their own journey in aviation.



This certainly isn't the last time you'll hear the name Amy Spicer! We will be following Amy's flying journey over the coming years as she continues her flight training and pursuit of her career dreams. Stay tuned for Amy's contributions in future editions of SportPilot. You can read her first column in this magazine.

Follow Amy's work at
girlscanflyanything.com

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YOUNG GUNS

FOLLOWING THE ACHIEVEMENTS OF RAAUS SCHOLARSHIP RECIPIENTS

For nearly 15 years, the RAAus Scholarship Program has played a vital role in helping hundreds of aspiring pilots, instructors, and aircraft maintainers pursue their aviation dreams. By providing essential seed funding, this program helps to offset the costs of flight training, making it more accessible for those who might otherwise face financial barriers.

Thanks to the ongoing support from Airservices, OzRunways, GoFly Aviation, and our dedicated Flight Training Schools, the program continues to empower individuals with a passion for aviation. Without the generosity of these organisations and individuals, many aspiring aviators would be unable to pursue their aviation goals.

Here's a look at how the 2024 scholarship recipients are progressing on their journeys.

LOUIS

At just 16, Louis reached an impressive milestone after receiving an Airservices Under 25 Scholarship—earning his Recreational Pilot Certificate.

Louis' mother shared, "This scholarship meant more than just financial assistance – it was a vote of confidence in Louis' potential and a reminder that he had a community rallying behind him every step of the way. As his mother, I am most proud of his developing Airmanship, ability to stay calm under pressure, and humility through learning. To see him look to the future and ponder the strength of his own abilities based on what he has achieved in aviation is heartwarming."

Guided by the support and expertise of his instructors, Louis not only achieved his certification but also built strong friendships, gained confidence, and realised a lifelong dream. Now, he's setting his sights on Cross Country and Passenger endorsements, eager to share his passion for flying with family and friends.

Wirraway
AVIATION MUSEUM
AEROHUNTER
FLIGHT TRAINING
SPCC

> **“This scholarship meant more than just financial assistance – it was a vote of confidence in Louis’ potential and a reminder that he had a community rallying behind him every step of the way.”**

ABBEY

Abbey was thrilled to receive an Airservices Under 25 Scholarship, recognising her commitment and passion for aviation. She recently achieved a significant milestone with her first solo flight and has now logged a total of 22.4 flying hours, including one solo hour. With the support of this scholarship, Abbey aims to continue advancing in her aviation journey, and she's already making impressive strides. Her dedication and hard work are bringing her closer to a promising career in the skies.

Caption: A memory from Abbey's first solo.

AEROHUNTER
FLIGHT TRAINING

ADAM

Adam was awarded an Instructor Scholarship and is currently sharpening his skills at Aerohunter Flight Training in Cessnock. During a recent training session, he observed a Trial Instructional Flight pre-flight briefing, led by his Instructor Trainer, before confidently delivering his own briefing. The session concluded with a ground theory demonstration, paving the way for Adam to take the lead in his next lesson. He's making remarkable progress in his training and is eager to keep building his instructional expertise.

Caption: Adam is starting to take the lead in flight lessons.

BEN

Ben, a recipient of the Airservices Under 25 Scholarship, has had a lifelong passion for aviation, largely inspired by his father. Aspiring to join the Air Force, he views this scholarship as a critical step toward his future career. Recently, Ben reached an exciting milestone by completing his first takeoff and landing alongside his flight instructor.

Caption: Ben has been a keen aviation enthusiast since a young age.

BRANDON

Brandon was awarded an Airservices Under 25 Scholarship and has made excellent progress, recently completing two training sessions with his new instructors at Secure Air Flight Training at Shepparton Aero Club. With 22 hours of flight training now under his belt, Brandon is making full use of his GoFly Online subscription to supplement his learning and take his skills to new heights.

Caption: Brandon has been taking advantage of his GoFly Online subscription.

FORCED LANDING IN FARMER'S PADDOCK

Words **Jenny Emonson**

Brumby Aircraft Australia

Sunday afternoon in perfect flying weather with my newly acquired Brumby aircraft and transition from GA to RAAus, I set off for a fly.

10nm from homebase having just levelled off at 3500 feet in cruising speed, suddenly the alternator light came on, followed by loss of power, instruments and no spinning prop.

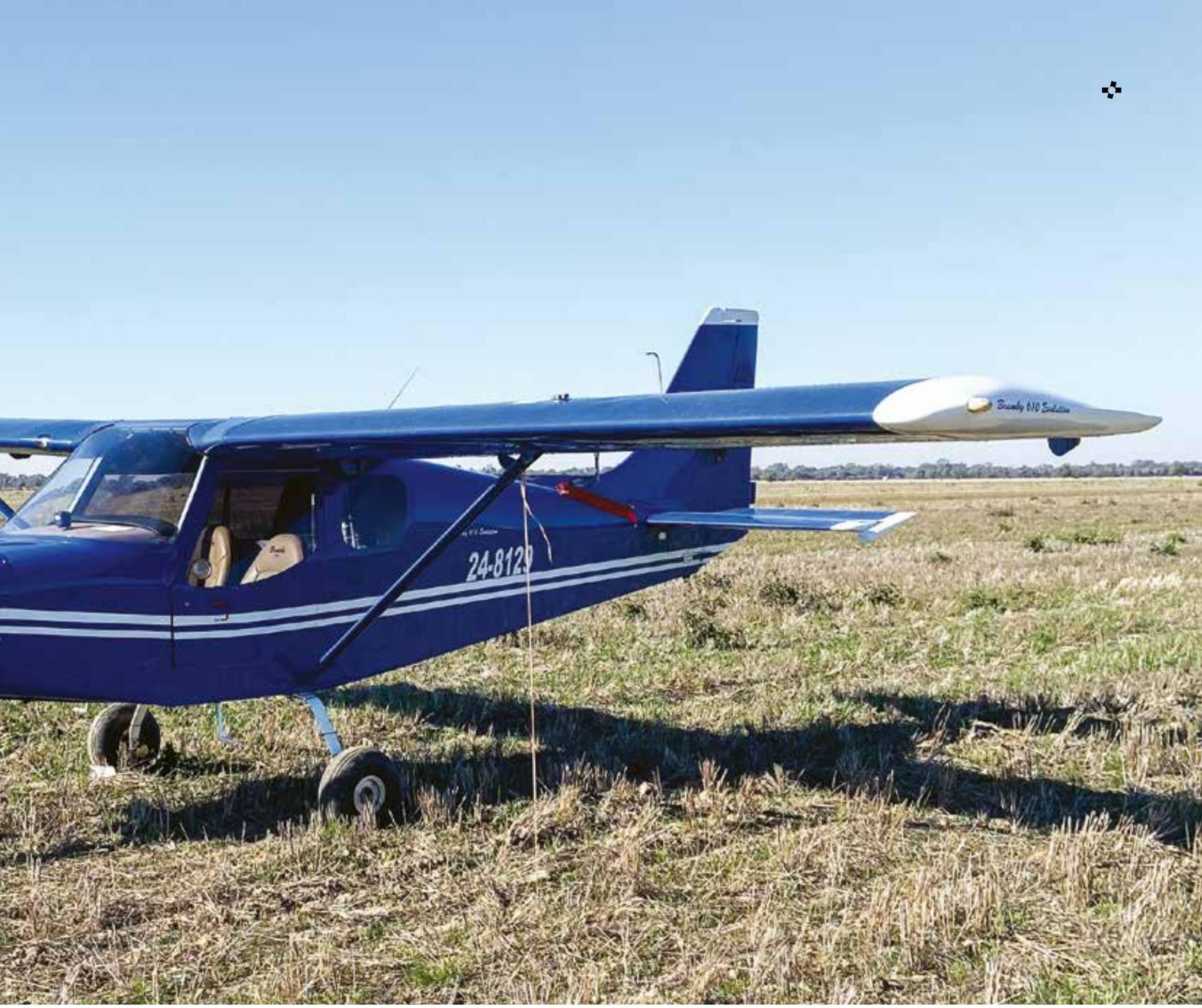
Decision time...

Engine failure checks and unsuccessful restarting attempts reinforced the need for me to get down and hopefully land safely. I commenced a guide approach whilst looking for a safe place to land. I knew I was in a farming area with a forest to my left. This involved avoiding fences, power lines, dams, trees, narrow dirt tracks and roads as well as avoiding the forest. Having managed to avoid these obstacles and getting closer to having to land, I picked the middle of an open paddock which looked clear and smooth and focused on my landing. The paddock turned out to be a rough fallowed paddock, but fortunately also soft.

Throughout my forced landing procedure, I had my Instructor's voice in my head telling me what to do, and in particular on touchdown, to "pull the stick back".

The outcome of this was a safe landing with no damage to the prop, wings or external aircraft and most importantly, no injury to myself or anyone else. In relation to the engine failure, unfortunately I had to replace the motor, due to a worn oil hose and blown conrod causing a hole in the top of the motor.

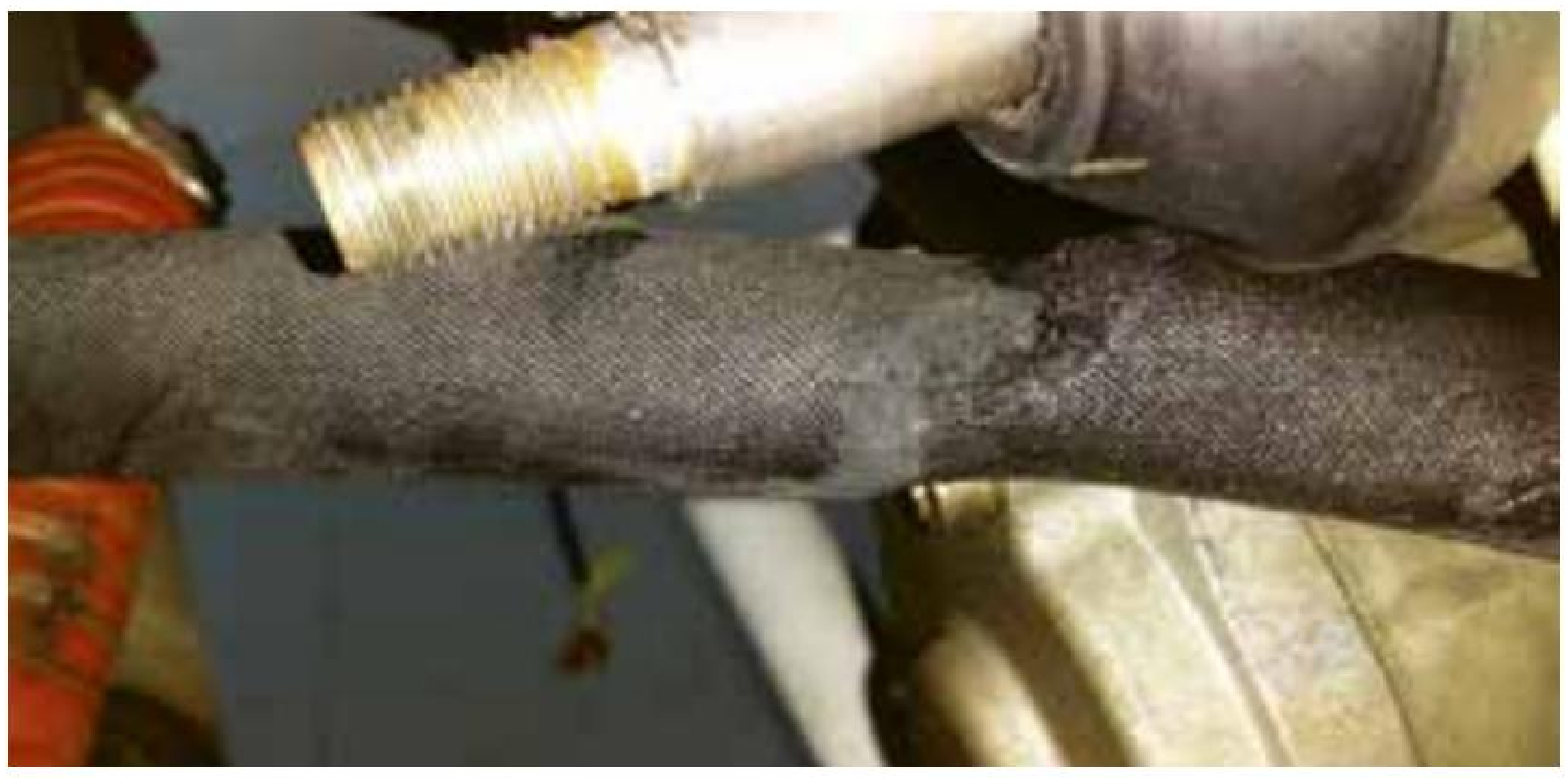
Whilst having to recover the aircraft and replace the motor was an unfortunate and expensive outcome, I am most thankful for a safe landing for the aircraft and myself, and to my aircraft engineer for getting me back in the air ASAP.



Main: The rough fallowed (fortunately soft) paddock where I landed. Inset: The cause of my forced landing.

> **"I wish to reinforce to all pilots the importance of training, refresher and emergency procedure practice. I fully acknowledge that my sound training permitted the best outcome for me and my aircraft following my engine failure."**

My thanks and appreciation go to my Instructor, who with her voice in my head, assisted me to a safe landing. Her professional training and instilling of the vital information required to manage a situation such as an engine failure, enabled the best outcome.



I wish to reinforce to all pilots the importance of training, refresher and emergency procedure practice. I fully acknowledge that my sound training permitted the best outcome for me and my aircraft following my engine failure.

I am happy to say I am now enjoying flying around in my Brumby again.

STAYING INVOLVED & CURRENT

A GUIDE FOR PILOTS

MARTY PETERS
Head of Flight Operations

From a young age, Marty soared the skies with model aircraft, sparking a lifelong passion for aviation. Over two decades in the industry, he has amassed a wealth of knowledge and expertise. Marty is a qualified RAAus Instructor and Commercial Pilot with several ratings, previously working as a CFI. His journey continues, learning new skills and inspiring fellow aviators.

marty.peters@raaus.com.au

For many pilots, the journey to earning a Pilot Certificate is filled with excitement, challenges, and a deep sense of accomplishment. However, staying involved and current in aviation can sometimes be a challenge, especially if life gets in the way or if you've had a break from flying. Whether you're a newly certified pilot or someone who has faced setbacks during training, staying engaged with aviation is crucial for maintaining your skills and passion. Here are some tips to help you stay involved and current.

REGULAR FLYING

One of the best ways to stay current is to fly regularly–sorry for stating the obvious here! Even if you can't fly as often as you'd like, try to schedule flights periodically. This helps keep your skills sharp and your confidence high. Consider joining a flying club where you can share flight time and costs with other pilots (remember, only one PIC at a time). If for some reason there is no club, hang out at the flight school. I'm sure you will meet up with someone with similar interests–might even be aviation! This not only makes flying more affordable but also provides a community of fellow aviators to learn from and share experiences with. If money is part of the problem, just being around aviation helps keep your mind active, especially if the CTAF radio is on in the background. Plus, you never know when you might pick up a new call sign like "Coffee King" or "Biscuit Baron."

CONTINUOUS LEARNING

Aviation is a field that is always evolving, with new technologies, regulations, and best practices emerging regularly. Stay informed by subscribing to aviation

magazines, joining online forums, and participating in webinars. Continuous learning keeps you updated and inspired. Additionally, consider attending aviation seminars and workshops to expand your knowledge and network with other pilots. Remember, the sky's the limit—literally!

USE OF SIMULATORS

Flight simulators are an excellent tool for staying current, especially when you can't get into the air. They allow you to practice various scenarios, including emergency procedures, navigation, and instrument flying. Many flight schools and flying clubs offer access to simulators, so take advantage of these resources to keep your skills honed. And hey, if you crash in a simulator, at least you don't have to fill out any paperwork!

NETWORKING AND MENTORSHIP

Building a network of fellow pilots can provide invaluable support and motivation. Attend aviation events, join local pilot associations, and participate in fly-ins. Connecting with more experienced pilots can offer guidance and encouragement. Mentorship can be particularly beneficial, as seasoned pilots can share their knowledge and help you navigate any challenges you might face. Plus, you might get some great stories out of it—just remember, no blame culture!

ENGAGING WITH YOUR FLIGHT SCHOOL

Flight schools play a crucial role in keeping pilots engaged. Schools can organise social events like BBQ nights with theory sessions, where pilots can gather, share stories, and learn from each other. These events can include discussions on various topics, from weather patterns to emergency procedures, making learning fun and less intimidating. Schools can also encourage experienced pilots to share their "war stories"—real-life experiences that provide valuable lessons and insights.

STAYING POSITIVE AND MOTIVATED

It's important to stay positive and motivated, even if you've faced setbacks. Remember that every pilot encounters challenges, and the key is to keep learning and improving. Set small, achievable goals for yourself, and celebrate your progress. Surround yourself with supportive people who share your passion for aviation. I personally failed my first PPL Theory exam so many years ago, but it drove me to study harder. Even now, I'm driven to learn and understand more.

CONCLUSION

Staying involved and current in aviation is essential for maintaining your skills and passion for flying. By flying regularly, continuing your education, using simulators, networking with other pilots, and engaging with your flight school, you can stay connected to the aviation community and keep your love for flying alive. Remember, aviation is a journey, and every step you take brings you closer to becoming a better, more confident pilot. The only downside to any of this will be the amount of instant coffee and Arnott's biscuits you will intake. But hey, at least you'll be well-fuelled for your next adventure!

Let's continue to support each other, share our experiences, and keep the skies safe and friendly.

KITTY HAWK TO EVTOL

WHAT CHOICES EXCITE OUR FUTURE PILOTS?

Words **Amy Spicer**

Photo of the first ever powered, controlled and sustained heavier than air human flight by the Wright Brothers in 1903.

On December 17, 1903, Orville Wright flew the first successful powered airplane at Kitty Hawk, North Carolina after Wilbur and Orville had spent the previous 4 years researching and developing the plane.

Their flight lasted 12 seconds. And travelled only 180 feet.

It would've been amazing to be a part of their incredible accomplishment, but surprisingly from the history books, apparently there were only four spectators. I wonder if people realised the impact on our lives whether more people would've gone to watch them make history?

Aviation is all of my life, and there's plenty of people older and more experienced than me in the industry. I look at all the inventions and discoveries, and imagine how wonderful it would be to be able to skip through time and see or experience the major aviation milestones.

dove
ELECTRIC A

> **As a future pilot, I look at my career as conventional in fixed-wing training, but the evolutions are very exciting. I could fly electric, hydro-electric or eVTOL? Why not all three?**

The Concord with its unique shape and supersonic speed, the SR-71 Blackbird with its amazing Mach-3.4 speed and unique ability to just outfly any enemy aircraft, Military fighters like the F-16 or F-35 Lightning. General aviation like the Cirrus SR series with the evolution of ballistic parachutes for single-engine emergencies. Aviation has embraced the glass cockpit and Garmin has become a common phrase for all aviators.

There are so many advancements in technology.

But now we are all to experience the greatest changes in the whole aviation industry – flight without fuel, oil, or traditional ICE engines!

Electric, hydro-electric and eVTOL are an emerging part of our aviation future. Kids now with a passion for flying can become our electric, hydro and eVTOL pilots of the future. Often when talking Aerospace we refer to it as a "space-race" as if it's the fastest to create a new aircraft wins. The new aircraft being developed now are being very carefully designed and tested. The innovations are amazing and safety is extremely important.

I have personally flown the Pipistrel Alpha Electro electric plane. Usually when I fly other aircraft I have to take numerous cushions and spend ages adjusting seats and seatbelts. The Pipistrel Alpha Electro is a good size for small pilots as the adjustments are quick and easy. I can even reach the rudder pedals! The size

tail
VIATION
Sydney Seaplanes

Credit: Dovetail Electric Aviation

of the Pipistrel also makes it nimble and although it doesn't have an aerobatic rating, flights are just pure FUN! I have flown along the coastline of Perth, close enough to see all the high-rise but also the pretty beaches and vast ocean. Without the traditional engine noise, it is very peaceful. Flying a Pipistrel just puts a huge smile on your face.

The first thing that strikes you as a student is how quick it is to pre-flight. A simple walk-around, battery check and passenger chat and we were taxiing. With no engine run-up required, any flight lesson is off to a quick start. The quiet cockpit allows for some great instructor feedback as this little electric is ideally suited to training.

The Pipistrel Alpha is from Textron Aviation and was originally manufactured in Slovenia and Italy. It is the first ever type-certified electric-powered aircraft approved for pilot training in day VFR. With a short take-off and a powerful 100+ fpm climb capability, it's a great little plane for 70-90 min training flights. In Australia, we have the certified Alpha and overseas they have Velis, Virus and Sinus. The evolution of electric will lead to greater mission ranges with increased battery performance, larger payloads and extra passenger configurations.

A company that also grabbed my attention was Dovetail Electric Aviation, with their hydrogen-electric powerplant. It provides a very exciting journey for them towards sustainable aviation. The prototype powerplant

23-2055
ALPHA

> **"We were lucky enough to grow up in an environment where there was always much encouragement to children to pursue intellectual interests; to investigate whatever aroused curiosity".**
> **- Orville and Wilbur Wright**

In another 121 years, what will people look back and see? *Credit: FlyOnE*

designed for aircraft with under 20 passengers, represents a fusion of a hydrogen fuel cell and electric propulsion. The system is capable of converting existing aircraft such as Cessna Caravan, Beechcraft King Air and Pilatus PC-12 to emission-free electric power offering a 40% reduction in operating costs. The heart of the powerplant is a hydrogen fuel cell system which generates electricity through a chemical reaction between hydrogen and oxygen emitting only water vapour as a byproduct. Truly emission-free! Dovetail are dedicated to accelerate the transition to sustainable aviation.

CEO and co-founder of Dovetail, David Doral said they are more committed than ever to making sustainable aviation a reality. "Our electric powerplant isn't just a prototype; it's a step towards transforming regional air travel into a zero-emission experience. We're excited about the potential this technology holds, not just for reducing operating costs but for reshaping how the world thinks about flying".

Our aircraft so far, even back to the Wright Brothers, have been mostly conventional. They have been easy to put into distinct categories – Fixed Wing or Rotary. Drone Pilots are also flying in the airspace but now eVTOL takes it a step further.

Joby Aircraft are expected to be the first eVTOL aircraft that's delivered to a customer in 2024.

Recently they have been doing certifications to fly electric air taxi services in Australia. The Californian-based manufacturing of the Joby eVTOL has been accelerated with a nearly 900 million dollar investment from Toyota. The electric taxis are intended to provide fast, quiet and sustainable transportation solutions for urban environments.

I've rarely taken a car-type taxi but the future sounds very exciting with eVTOL aircraft taking over the taxi services. As a future pilot, I look at my career as conventional in fixed-wing training, but the evolutions are very exciting. I could fly electric, hydro-electric or eVTOL? Why not all three?

I'm very happy dipping oil and checking Avgas when I'm flying a Cessna, but I'm born into the generation where everything in our lives needs charging – so why not the planes too? Not everyone will agree and that's OK. Kids get excited about new things when some others may take a more cautious approach. When we all sit back and look at how far aviation has come, I think we'll all agree it's a pretty amazing industry to be in.

In another 121 years, what will people look back and see?

The Innovators like Pipistrel, Dovetail and Joby will have done the hard work and we'll all have got to enjoy the new flights. Air taxis and sustainable aviation won't be new catchwords and pilots will fly an amazing assortment of aircraft.

Aviation is really pretty awesome, and I think I'm curious like Orville and Wilbur to see where aircraft designs and pilots will end up.

"We were lucky enough to grow up in an environment where there was always much encouragement to children to pursue intellectual interests; to investigate whatever aroused curiosity". – Orville and Wilbur Wright.

I'm glad they include children, and my wish is that more aviation includes children. We are going to be the generation experiencing the greatest aviation change. I wonder what the Wright Brothers would think of aviation now?

PIPISTREL
Girls

Australian Government
Civil Aviation Safety Authority

flightsafety australia

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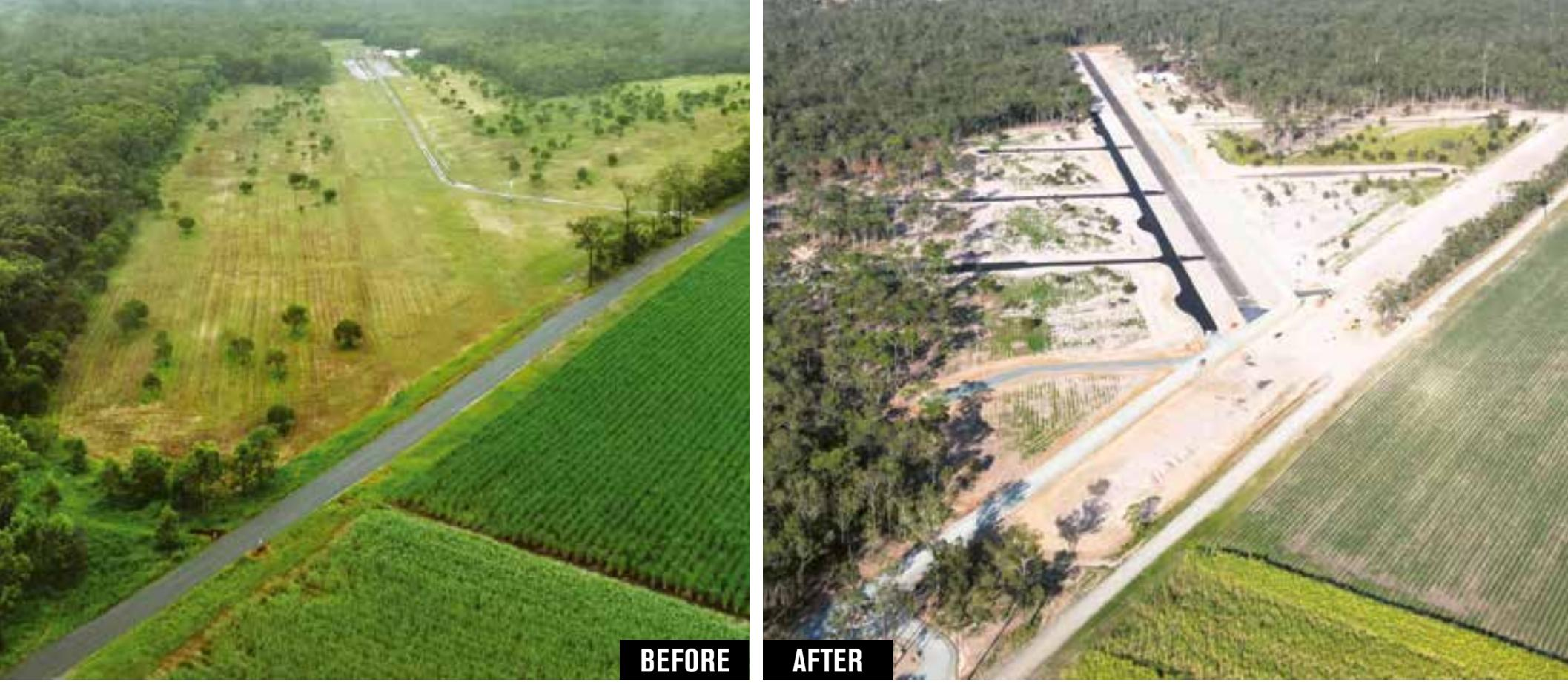

Aquila Estate is expected to be completed in Q1 2025. *Credit: Aquila Estate*

AQUILA ESTATE AND FLYING CLUB

A VISION REALISED IN LUXURY AND AVIATION

In the lush heart of Queensland's Fraser Coast, Aquila Estate and Flying Club has risen from a bold vision to an extraordinary, nearly completed community. This once-dreamt-of sanctuary, developed by VFR Developments, combines luxury living with the freedom of personal aviation, meeting the unique desires of aviation enthusiasts and nature lovers alike.

THE JOURNEY FROM VISION TO REALITY

With all major milestones achieved, Aquila is on track for completion in the first quarter of 2025. This evolution from a blueprint to a fully-realised community reached a thrilling milestone with the estate's first landing on September 6th.

FREEDOM IN THE SKIES: AQUILA'S AVIATION FACILITIES

Aquila's position outside of controlled airspace offers residents unparalleled freedom to fly. Here, pilots enjoy the rare benefit of unrestricted take-offs and landings, ensuring smooth, hassle-free flying for all aviators. With a completed asphalt runway and a lush grass runway in the works, Aquila provides flexibility and convenience for a diverse range of aircraft. This unique blend of state-of-the-art aviation facilities, paired with attached hangar spaces for every home, is the realisation of the founders' vision to build a sanctuary where the thrill of flight is seamlessly integrated into everyday life.

A THRIVING COMMUNITY AT AQUILA

Aquila is more than a residence; it's a close-knit community built around shared values of luxury, adventure, and respect for nature. Spanning 50 hectares, the estate has quickly gained a reputation as a haven for those who appreciate both tranquility and excitement. With almost 50% of the lots already sold, Aquila's growing community embraces a lifestyle that balances refined living with the boundless beauty of the Fraser Coast.

COMMITMENT TO EXCELLENCE AND SUSTAINABILITY

Aquila's unwavering commitment to safety, sustainability, and architectural excellence underscores every facet of its development. Supported by 3Cap Financial, the project maintains financial stability, embodying a responsible approach to luxury that is both eco-conscious and community-focused.

THE FINAL APPROACH: JOIN AQUILA'S EXTRAORDINARY JOURNEY

As Aquila Estate and Flying Club nears completion, the community is taking shape, welcoming those who dream of a life where luxury and aviation meet. Don't miss the opportunity to make Aquila your home.

Ready for a new era of recreational flying?

Strap-in and experience the SHARK 600's agile handling, impressive cruise speed, sophisticated safety features and stunning looks. Engineered for long-distance cross-country adventures, this aircraft combines remarkable fuel efficiency with a lightweight frame built for performance. Experience the future of flight with the SHARK 600.

Book your SHARK 600 Demo Flight at sharkaero.com.au

BOOK YOUR DEMO FLIGHT TODAY!

Are you ready to experience the thrill of the SHARK 600 firsthand? Book a demo flight now for early 2025 at www.sharkaero.com.au

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JOIN OUR TEAM OF DEMO PILOTS!

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SHARKAERO

sharkaero.com.au

RESKINNING A BUSHCAT

Words & Images **Peter John**

The BushCat owned by Mark Butcher was a bit over 5 years old and had spent a lot of time parked outside, exposed to the elements. Prior to Mark purchasing it and relocating it to Tasmania, UV had affected the outer top surface of the TRILAM fabric, and it was showing cracks, similar to what you might find in the gel coat of a glass fibre/composite aircraft.

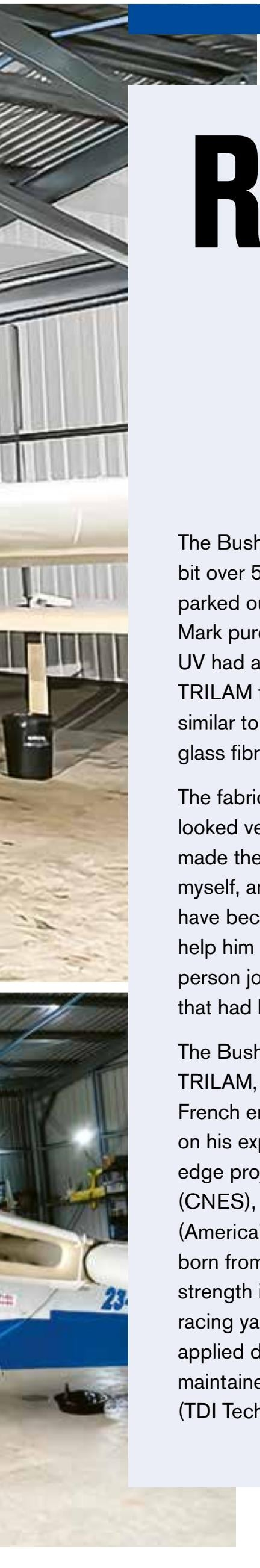
The fabric was still structurally sound, but it looked very shabby and weather beaten, so Mark made the decision to replace it. I have a BushCat myself, and through this connection Mark and I have become good friends. So, I volunteered to help him re-cover his BushCat. It was a two-person job. We believe this was the first BushCat that had been “re-covered” in Australia.

The BushCat is now covered in a fabric called TRILAM, that was created in 2005 by a French engineer named Pascal Rossignol based on his experience from his work on cutting edge projects in aeronautics (Airbus), space (CNES), military (DCN), and nautical competition (America’s Cup). This high-tech material was born from the pursuit of performance and strength in sail making for the America’s Cup racing yachts. The pre-stress techniques applied during the weaving of the cloth and maintained during the manufacturing process (TDI Technology), and the dimensional stability of TRILAM give the material what is believed to be a superior strength and aerodynamic profile.

The process involved removing the fibreglass wing tips, wing ribs, flaps and ailerons and the old fabric, inspecting all the wing attachment points, wing spars, struts, pulleys, and bracing wires. We also replaced fixing hardware where required and then fitted the new wing skins. The wing ribs were re-installed, and the fabric was then laced (a lot) in place with nylon cord which requires tensioning at least 3 times – all by hand, while carefully ensuring that the fabric alignment is correct relative to the wing spars, wing struts and the control surface attach points. The flaps and ailerons were then re-fitted, and dual inspections completed. The BushCat also features vortex generators (VGs) fitted to the top surface of the wing to reduce the stall speed and improve STOL performance. Attaching these was the final, painstaking task and at a last we had a Bush Aircraft once again!

Mark’s BushCat is now ready for more exciting Bass Strait crossings (I think he has now completed about 9 crossings), and outback/off airport adventures.

Follow Mark’s flying adventures on his YouTube Channel.



The BushCat is ready for more exciting adventures.

SO YOU WANT TO BUILD AN AIRPORT

EVER WANTED TO BUILD YOUR OWN RUNWAY? OUR EDITOR DOES, SO HE ASKED A FEW PEOPLE HOW THEY WENT ABOUT IT AND COLLECTED SOME ADVICE ON THE PITFALLS.

Words **Jack Walker**

I had cause to drop into Yamba recently and I remembered the story of Bob McIntyre who decided he wanted to build an airstrip on his land. So, he rang the local council and they thought it was a good idea. They thought it was such a good idea that they even lent him their equipment to assist him with the build. That ain't gunna happen in this day and age. Still, don't let that discourage you. Bob has passed away, but if you happen to be buzzing around near Yamba, drop into YPLT (Palmers Island/Maclean) and see what one bloke can do if he sets his mind to it.

I've always fancied the idea of my own personal landing strip. So, for all of us with dreams of landing and walking to the house, here's a quick rundown on the ins and outs of building your own. Let's start off by discussing the difference between an airstrip/ALA and an airport/aerodrome. An airstrip is a private place for you and your guests to take off and land. In CASA language, it's called an Aircraft Landing Area (ALA). They also call an airport an aerodrome. *Sigh*.

The rules – and what you can and can't do in an area – change greatly by council and land usage type. So no, you won't be flying your fixed wing out of a suburban back yard, regardless of your aircraft's STOL characteristics. There may have been a bloke who was possibly related to me who rebuilt a Tiger Moth in his garage on the edge of the Yarra River during the 1970s and allegedly flew it off the lawn before his ex-wife could destroy it... but no one can prove that. In the modern era, that isn't going to happen without some severe recriminations. So, forget your urban airstrip. What follows is a more likely scenario.

Drop into YPLT and see what one bloke can do if he sets his mind to it.

An airstrip is a private place for you and your guests to take off and land.

Massive cop-out: What follows is the uniformed views of the author and his opinionated mates. Do your own research before getting too excited.

If you have acreage, then it becomes a lot more plausible. Remember to take most of this as a guideline, because every state is different, and every local council is its own duchy as far as rules and interpretation go. But here we go... Most land has a usage classification – rural, mixed-use, etc. So, you need land that doesn't have the wrong type of usage, where activities such as aviation aren't prohibited. The next thing to check is that you don't have an overlay – like environmental protection, cultural significance, or similar – that might require you to apply for a permit. Remember that you can always apply for a permit for anything – it just might not get approved. Provided you don't have a clash with the land use classification or a conflicting overlay, then you probably won't need council permission for a landing strip. An extra disclaimer just in case you didn't get the first one – this is entirely subject to your local council and a couple of other factors.

Factor number one: neighbours. If your neighbour hates the sound of aircraft and you're overflying his chook shed, you might find them complaining to the council and you will probably receive a 'please explain' notice. That almost never goes well. So, have a good chat to your neighbours, figure out an orientation to minimise impact, and fly neighbourly. At the end of the day, there is only one way to know for sure if your local council or CASA is going to have an issue, and that is to ask them. There is a school of thought that says 'it is better to seek forgiveness than approval'. However, I'm not so sure in this case that the council or CASA are the forgiving type, so I'd be asking upfront. That's not to say you can't work the rules. One nameless gentleman we spoke to who has been through the process, suggested that you avoid building an 'aircraft hangar'. Apparently, that could trigger a bunch of requirements. In the end, he applied for a permit for a farm shed. The fact that he stores an aircraft in it is coincidental. This was done based on a friendly council officers' advice. Take it as you will.

The one group of people who can easily ban you from using your land as a landing strip is CASA. As soon as your wheels leave the ground, you're in their territory. If it conflicts with CASA's existing airspace or activities, you are going to find your fun being severely limited. Interestingly, the 1998 Civil Aviation Act, which covers this, doesn't actually have a section dedicated to Airfields – or Aerodromes as CASA likes to call them – but it forms the basis of how they get to make the rules and enforce them. And if you can figure out how that

> **I've always fancied the idea of my own personal landing strip.**

works, maybe you would make a better civil servant than I would. Regardless, you would probably want to run your plan by them before going too far. We reached out to CASA like real journalists and hit them up with a general enquiry on the subject.

Second massive cop out: What follows is actually the official position of CASA as relayed to us by a CASA Spokesperson. So, you might take this next part as being gospel.

"A small airstrip on private property will generally be classified as an Aircraft Landing Area (ALA). ALA are not oversighted by CASA, nor are there any specific regulatory requirements for operating an ALA. Any place (including ALA) may be used as an aerodrome if the pilot and/or operator of an aircraft determine it is suitable for that purpose."

Boy, they really shouldn't have told me that.

The responsibility for safe operations at an ALA lies with the pilot in command and operator under the conditions of sub-regulation 91.410 (2) (a) (iv) of the Civil Aviation Safety Regulations 1998. CASA has produced some guidance on the use of ALAs. This guidance is aimed primarily at pilots to assist with the assessment of a location for landing or taking off, however may be useful as general information for the operator of an ALA. Please see advisory circular AC 91-02 v1.1 Guidelines for aeroplanes with MTOW not exceeding 5,700 kg – suitable places to take off and land. The Part 139 Manual of Standards provides a set of standards that certified aerodromes must comply with. This document may also be used as general guidance for uncertified aerodromes and ALAs with relation to aerodrome systems, lighting, infrastructure, and so forth. This story from Flight Safety Australia discusses what is needed for pilots to operate safely at ALAs: "Plan before you land | Flight Safety Australia."

Okay, so I started to lose focus around the third paragraph, but we included it because there is some handy information there. Whenever I read CASA

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material or any planning information, I start to suffer from MEGO (My Eyes Glaze Over) but if you push through the above resources, you can actually see that if you're not conflicting with CASA regulations, they will let you do your own thing. Best to check though.

One man who decided not just to have an airstrip, but went the whole hog is Gary Baum from Lethbridge. Back in 1991, he decided to build and operate an airstrip. Gary was an ultralight pilot from back in the day when, to be an ultralight pilot, you simply bought an ultralight and flew it. If you survived, you were a pilot. He flew Thrusters at Bacchus Marsh.

> **If you've got 13-odd million dollars lying around and want to own an airport, this might be for you.**

But all the GA pilots were a bit snooty about it, so he decided to investigate his own airstrip. He looked at several properties, but price and unhappy neighbours at other sites eventually led him to Lethbridge. He spoke to council and said they would approve it if he could convince the neighbours that it was okay. Gary must have been a pretty persuasive fella, because all the neighbours signed on. Gary now had an airstrip. Then it figuratively took off. Each year for the next 15 years they built a new hangar. In fact, it got so big that council said he had to rezone the whole thing. Which he did, at great expense. But that turned out to be a good idea because there's now 40 odd hangars and over 80 aircraft based there, with an active school and flying club.

You can save yourself a lot of trouble by just buying Lethbridge, because after 30 years he is retiring and it's on the market. So, if you've got 13-odd million dollars lying around and want to own an airport, this might be for you. If you haven't got 13 million dollars handy, your own patch of land in an Air Park like Aquila Estate in Queensland might be the best of both worlds – you can read more about the Estate's progress in this magazine. But if you still have a hankering to build your own airstrip, then I hope this has been useful. Of course, I do have a philosophy on projects that I never want to find out too much information or I would never attempt anything. So, what's stopping you?

Each year for the next 15 years they built a new hangar at Lethbridge.

RESOURCES

Civil Aviation Safety Regulations 1998

Guidelines for aeroplanes with MTOW not exceeding 5,700 kg – suitable places to take off and land

Part 139 (Aerodromes) Manual of Standards 2019

Plan before you land Flight Safety Australia

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THE FUTURE OF AIRCRAFT BATTERIES

Words **James Heath**

Aircraft Batteries: A Light Upgrade for Hobbyist Pilots

Batteries are an essential part of flying, especially for pilots operating lightweight aircraft. They power crucial instruments, provide backup during emergencies, and support the electrical systems that keep aircraft functioning smoothly. While lead-acid and gel batteries have long been the industry standard, lithium iron phosphate (LiFePO4) batteries are emerging as a promising alternative. Offering reduced weight, enhanced performance, and greater longevity, LiFePO4 batteries can significantly impact the flying experience for pilots operating ultralight and small recreational aircraft.

The Evolution of Aircraft Batteries

The use of batteries in aviation traces back to the 19th century with the introduction of lead-acid batteries, which were widely adopted due to their reliability, affordability, and ease of manufacture. Despite their durability, they were heavy and required regular maintenance. Gel batteries improved upon this design, replacing the liquid electrolyte with a thickened gel that reduced the risk of leaks and provided better resistance to vibration–important features for aviation use.

In recent years, advancements in lithium-based batteries have changed the landscape of energy storage across industries. However, not all lithium

Pipistrel Alpha Electro with built in 21 kW battery.

technologies are ideal for aviation. Lithium-ion batteries, commonly found in consumer electronics, pose a fire risk due to their potential for overheating. Instead, lithium iron phosphate (LiFePO4) batteries, which are safer and more stable, have become increasingly attractive for small aircraft applications. Their light weight and consistent power output align well with the performance demands of ultralights, gliders, and light sport aircraft.

Chemistry and its Impact on Flight

The performance of a battery depends largely on its chemistry. Lead-acid and gel batteries rely on chemical reactions between lead plates and sulfuric acid, though gel models use a thickened electrolyte to minimise spillage risks. These batteries, while dependable, are heavy and require ongoing maintenance, which adds to the operational burden for pilots.

In contrast, lithium iron phosphate batteries employ a different chemistry, combining lithium, iron, and phosphate to generate energy with greater efficiency and stability. They are not only lighter but also provide more consistent voltage delivery, ensuring that avionics and other electrical systems perform reliably throughout a flight. Furthermore, LiFePO4 batteries demand little maintenance and have a longer operational lifespan, making them an appealing option for recreational pilots seeking reduced downtime.

The Importance of Weight in Light Aircraft

Weight management is critical in aviation, especially in small recreational aircraft, where every kilogram directly influences performance. Excess weight affects fuel efficiency, climb rate, and handling, so reducing weight where possible can improve the flying experience. Swapping a heavy lead-acid or gel battery for a lighter lithium iron phosphate battery can lead to better performance, increased payload capacity, and improved fuel economy. A lighter battery also

> **Not all lithium technologies are ideal for aviation. Lithium-ion batteries, commonly found in consumer electronics, pose a fire risk due to their potential for overheating.**

gives pilots the flexibility to carry additional gear or fuel without compromising safety.

However, altering the weight of a key component like the battery requires careful planning. Replacing a heavier lead-acid battery with a lighter lithium battery shifts the aircraft's centre of gravity, which could impact flight stability and control. Even small shifts in the centre of gravity can make a noticeable difference in how a lightweight aircraft behaves. Pilots must conduct precise weight-and-balance calculations to ensure the aircraft remains within safe operational limits.

Safety Considerations with Lithium Batteries

Although lithium batteries have gathered attention for safety concerns, these concerns primarily apply to lithium-ion technology, which is prone to overheating. Lithium iron phosphate batteries, by comparison, are far more stable. They are designed to tolerate higher temperatures and are less likely to experience thermal runaway or catch fire, even under stress.

Despite these safety advantages, no battery is entirely without risk. Proper installation, regular inspections, and adherence to maintenance procedures are essential to ensuring that LiFePO4 batteries function as intended. Aircraft mechanics must follow best practices for installation, and pilots should monitor battery health over time to prevent unexpected failures.

Cost and Longevity: Are Lithium Batteries Worth It?

While lithium iron phosphate batteries come with a higher upfront cost than lead-acid or gel batteries, they offer considerable savings over time. Traditional lead-acid batteries typically need to be replaced every few years, while LiFePO4 batteries can last five to ten years or more. Their extended lifespan and minimal maintenance requirements reduce operational costs, making them a practical long-term investment for recreational pilots.

For those who prefer flying over maintenance, lithium batteries offer significant advantages. Fewer replacements and less downtime mean more time spent in the air. Over the lifespan of the battery, these factors can outweigh the initial expense, delivering both financial and practical benefits.

Regulatory Considerations: Compliance with Australian Aviation Rules

In Australia, aircraft modifications, including battery upgrades, must comply with Civil Aviation Safety Authority (CASA) regulations. For certified aircraft, switching to a lithium iron phosphate (LiFePO4) battery requires recalculating the center of gravity (CG) and updating weight-and-balance records. Approval from a CASA-authorised maintenance organisation (AMO) or licensed aircraft maintenance engineer (LAME) may be needed, and some changes may require a Supplemental Type Certificate (STC) or engineering order.

Pilots under Recreational Aviation Australia (RAAus) or operating experimental aircraft enjoy more flexibility, but must still ensure modifications align with safety guidelines. Updated weight-and-balance records are essential to maintain safe handling. Proper installation, inspection, and monitoring of lithium batteries are crucial. Adhering to these regulations ensures compliance and safe operations, allowing pilots to benefit from advanced battery technology confidently.

The Future of Aviation Batteries

Battery technology continues to evolve, with solid-state batteries showing promise as the next breakthrough. These batteries, which use solid electrolytes instead of liquid, offer higher energy density, improved safety, and longer lifespans. Though still in development, they represent a glimpse into the future of aviation power systems. As these new technologies mature, they may further revolutionise the way aircraft store and use energy.

For now, lithium iron phosphate batteries offer the best combination of weight savings, performance, and safety for pilots looking to upgrade from traditional lead-acid or gel batteries. Their accessibility and proven advantages make them a compelling option for recreational pilots eager to enhance their flying experience.

Switching to lithium iron phosphate batteries can unlock meaningful benefits for pilots flying ultralights, gliders, and small sport aircraft. The reduction in weight translates into better handling, improved fuel efficiency, and increased payload capacity, while the longer lifespan reduces maintenance requirements and downtime. Though the initial cost of these batteries may seem high, the long-term savings and enhanced performance make them a worthwhile investment.

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AVALON AIRSHOW 2025

Australia's most anticipated airshow is set to make a spectacular return from March 25-30, 2025, at Avalon Airport. Prepare for an exhilarating multi-day event featuring a dynamic lineup of high-flying entertainment and ground-based activities. This year's airshow promises to be a highlight of the aviation calendar, showcasing the latest and greatest in military and civilian aircraft from around the world.

At Avalon 2023 general aviation aircraft made up more than a third of the 396 aircraft on display with the organisers hoping to exceed that this year.

"We hear a lot about innovations with commercial and military aircraft, but the general aviation and airsport sectors have been pioneers of new technologies, in everything from materials to avionics, alternative fuels, licensing and construction," said Justin Giddings, CEO of Avalon 2025 organiser AMDA Foundation.

"This is still the sector of aviation that often provides the general public's first connection with an aircraft, the first spark that leads someone to pursue aviation as a hobby or even a career. So, it is an important part of the future development of the Australian aviation community."

RAAus Marquee

RAAus will have a marquee setup in the 'General Aviation Precinct' along with the SportPilot Magazine writers. So stop by and chat with the team and meet some fellow aviators and see what the team have been getting up to!

Lethbridge Airport offering camping and shuttle bus

Pilots flying in for Avalon 2025 will find camping and an airshow shuttle bus at Lethbridge Airport (YLED). Apart from using an established airport with both tarmac and grass runways, there will be camping facilities and a shuttle bus taking Airshow ticket holders to and from the main airshow entrance at Avalon Airport.

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8-9 February 2025

HUNTER VALLEY AIRSHOW

The Hunter Valley Airshow is back for another weekend of impressive displays at Cessnock airport. The lineup has just been announced with a huge range of war birds including a F4U-1D Corsair, De Havilland Vampire, Hawker Sea Fury, Grumman Avenger, P-40 Kittyhawk, Wirraway and Yak-52.

There will also be non stop air displays with breath-taking aerobatics and live stunts.

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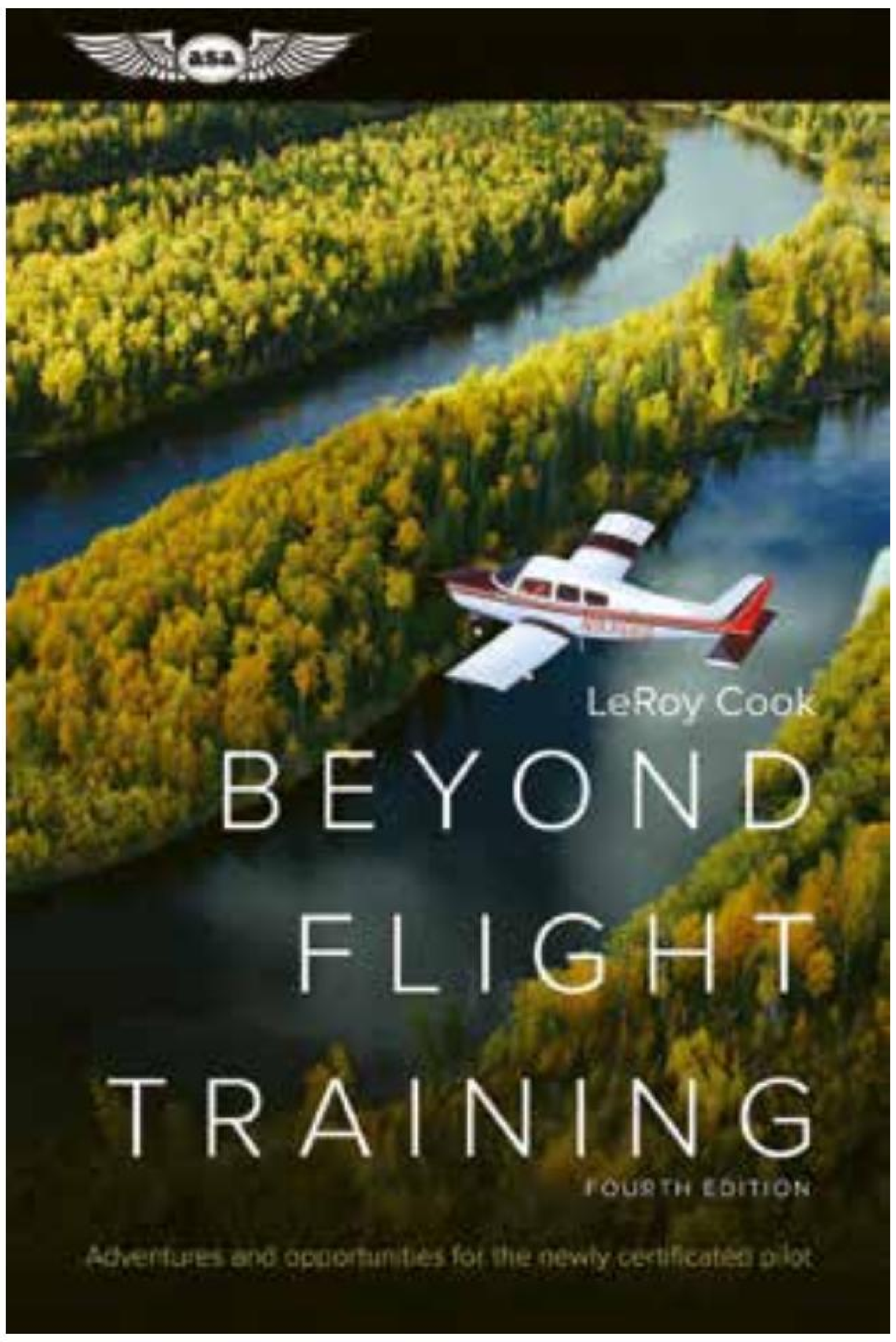
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Cook combines his extensive experience with a clear, engaging writing style, making complex topics accessible to pilots of all levels. Whether you're preparing for advanced certifications or simply looking to enhance your flying proficiency, Beyond Flight Training provides valuable guidance on safety, technique, and the evolving landscape of aviation. Perfect for those who aspire to take their flying to new heights, this book is a fantastic resource for pilots who have completed their training and are wanting to refine their skills.

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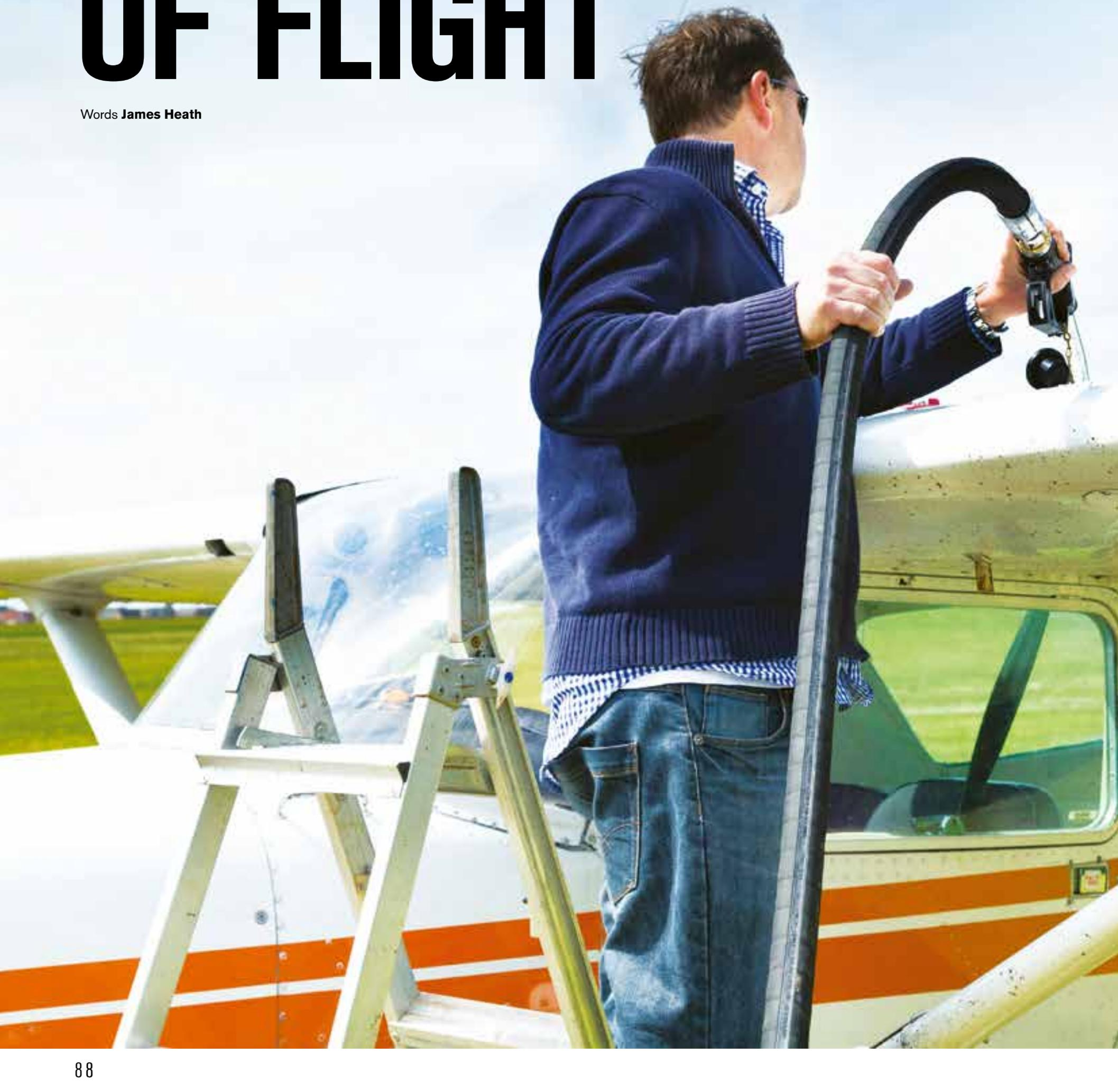
AVIATION FUEL DEMYSTIFIED:

THE LIFEBLOOD OF FLIGHT

Words **James Heath**



Aviation fuel is the unsung hero of flight—engineered with precision to ensure the performance, reliability, and safety that flying demands. While some may assume it's similar to the petrol used in cars, aviation fuel is a different beast altogether. From AVGAS, which powers smaller piston engines, to JET A1, which fuels turbines, each type of aviation fuel plays a critical role in keeping aircraft aloft. These differences also come with challenges, such as potential safety risks that pilots need to understand to avoid costly or dangerous mistakes.

Aviation Fuel vs. Car Fuel: More Than Just Petrol

A common misconception is that aviation fuel is comparable to automotive petrol, but the reality is far more complex. Aviation fuel must perform under extreme conditions: freezing temperatures, high altitudes, and intense mechanical strain. The type of fuel an aircraft uses, how it's stored, and the conditions it encounters all contribute to the success or failure of a flight. Understanding these factors is critical for pilots.

In this article, we'll explore the three main types of aviation fuel—AVGAS, MOGAS, and JET A1—and what makes each one unique.

AVGAS: A Long-Standing Staple Undergoing Change

For decades, AVGAS (aviation gasoline) has been the fuel of choice for general aviation, particularly for piston-engine aircraft. Easily recognisable by its blue tint, AVGAS 100LL (low lead) has an octane-rich formulation designed to prevent engine knock, ensuring reliable performance in high-stress flight conditions.

Unlike automotive petrol, AVGAS is resistant to water contamination, which is essential for aviation safety. However, water that does manage to get into the fuel system can settle at the bottom of tanks, potentially causing engine issues if it isn't properly drained before flight.

Environmental concerns have driven the industry to move away from leaded AVGAS, with new unleaded alternatives such as G100UL and UL94 currently being developed. These new fuels aim to provide the same high performance as traditional AVGAS without the environmental impact. The transition won't be simple—many aircraft engines may need modifications to run effectively on the new fuels. Pilots will need to stay informed about these changes as fuel selection becomes more complicated during this shift.

MOGAS: An Alternative for Light Aircraft

MOGAS, or motor gasoline, is essentially high-grade car fuel that meets aviation standards. It offers a lower-cost option for some pilots, particularly those flying light-sport or recreational aircraft. The affordability and availability of MOGAS make it appealing, but it's important to understand that not all MOGAS is suitable for aviation.

The petrol sold at most service stations contains ethanol, which can cause serious problems for aircraft. Ethanol attracts water, leading to phase separation—a process where water and fuel form distinct layers in the tank. This can cause engine failure if undetected. Aviation-approved MOGAS is ethanol-free, ensuring a safer and more reliable performance for aircraft. However, it's not appropriate for every engine. Pilots need to be sure their aircraft is compatible with MOGAS before making the switch.

The familiar sight of planes queuing up for fuel.

JET A1: The Kerosene-Based Powerhouse

For jets and turbine-powered aircraft, JET A1 is the fuel of choice. It's a kerosene-based fuel that offers high energy content and stable performance at high altitudes. While JET A1 is primarily used by commercial jets, it's becoming more popular in general aviation thanks to the increasing use of diesel-powered engines optimised for aviation.

One of the key advantages of JET A1 is its low volatility, making it safer to handle compared to AVGAS or MOGAS. Its freezing point of -47°C also makes it ideal for high-altitude flying, where extreme cold could otherwise cause fuel to freeze and clog lines.

Diesel engines running on JET A1 are gaining popularity for their fuel efficiency and reliability, offering recreational pilots a cost-effective alternative to AVGAS-powered aircraft. As kerosene is often cheaper than AVGAS, diesel-powered planes can provide significant savings over long distances, making them an increasingly attractive option.

The Cost of Fuel: Balancing Price and Efficiency

Fuel costs are a significant part of flying, and different types of fuel come with varying price tags. AVGAS is the most expensive due to its complex production process and distribution requirements. MOGAS offers a cheaper alternative, but it has a lower energy density, meaning that aircraft may burn more fuel to cover the same distance.

JET A1, while often more affordable than AVGAS, offers the highest energy content, making it the most efficient option for long-haul flights. However, fuel prices fluctuate depending on location and market conditions, so pilots need to be savvy when it comes to fuel planning, especially when flying long distances or to remote areas.

Water Contamination: A Hidden Threat

One of the biggest risks to aviation fuel is water contamination. Water can get into the fuel system through condensation, particularly in environments with significant temperature variations. Water in fuel is especially dangerous for aircraft, as it can block fuel lines and cause engine failure.

The type of fuel used affects how water behaves in the system. In AVGAS, water sinks to the bottom of the tank, waiting to be drained before it can cause damage. MOGAS, with its ethanol content, is trickier–

> **A common misconception is that aviation fuel is comparable to automotive petrol, but the reality is far more complex.**

water can mix with the fuel, making contamination harder to detect. While JET A1 is generally less prone to water contamination, it still requires careful handling to avoid build-up.

Pilots must be diligent in managing water contamination by regularly draining fuel sumps and tanks before each flight. Even small amounts of water can cause serious problems in the air. Storing aircraft with full fuel tanks helps minimise condensation, reducing the amount of air in the tank where moisture could collect. In cold climates, fuel additives can also be used to prevent water build-up.

Staying Safe: Avoiding Fuel-Related Accidents

Many fuel-related accidents in aviation result from negligence—using the wrong fuel, skipping critical safety checks, or failing to account for water contamination. Pilots, no matter how experienced, can fall into the trap of complacency. It's important to maintain discipline and take fuel management seriously.

Checking for water in the fuel system should become second nature. Ensuring that the correct fuel is used, and that it meets the aircraft's engine specifications, is absolutely vital. As aviation technology continues to evolve, so must a pilot's understanding of the fuels they use, especially with the introduction of new unleaded alternatives and the growing use of JET A1-powered diesel engines.

Embracing the Future of Aviation Fuel

The aviation industry is on the cusp of significant change, with the gradual phase-out of leaded AVGAS and the development of new unleaded alternatives. Diesel-powered aircraft and turbine engines running on JET A1 offer exciting possibilities for general aviation, providing pilots with more fuel-efficient and environmentally friendly options. Yet, these advancements bring with them new challenges, requiring pilots to stay informed and adaptable.

In the end, understanding aviation fuel is about more than just saving money—it's about ensuring the safety and success of every flight. Fuel management may seem like a mundane part of aviation, but it's a critical factor in keeping pilots and passengers safe in the skies. By respecting the complexities of aviation fuels, pilots can fly with confidence, knowing they are prepared for whatever challenges may arise.

Aviation fuel is a vital part of every flight, and understanding its complexities is essential for any pilot. From the transition to unleaded fuels to the growing use of JET A1, the landscape of aviation fuel is changing. By staying informed and vigilant, pilots can ensure their aircraft operates safely and efficiently, no matter where they fly.

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Kangaroo Island (YKSC)

Touch down and experience the raw landscapes and rugged wilderness of Kangaroo Island, located just off South Australia. As the country's third-largest island, isolation from the mainland has meant that nature has thrived here, creating a wonderful escape for those wanting to unplug and unwind.

FACILITIES

Kingscote Airport (YKSC) is a modern facility near the main hub of the island. It has recently been upgraded with its own trendy café and visitor information to kick off your visit in style. Hire cars and transfers are readily available, but it's recommended to book in advance.

STAY

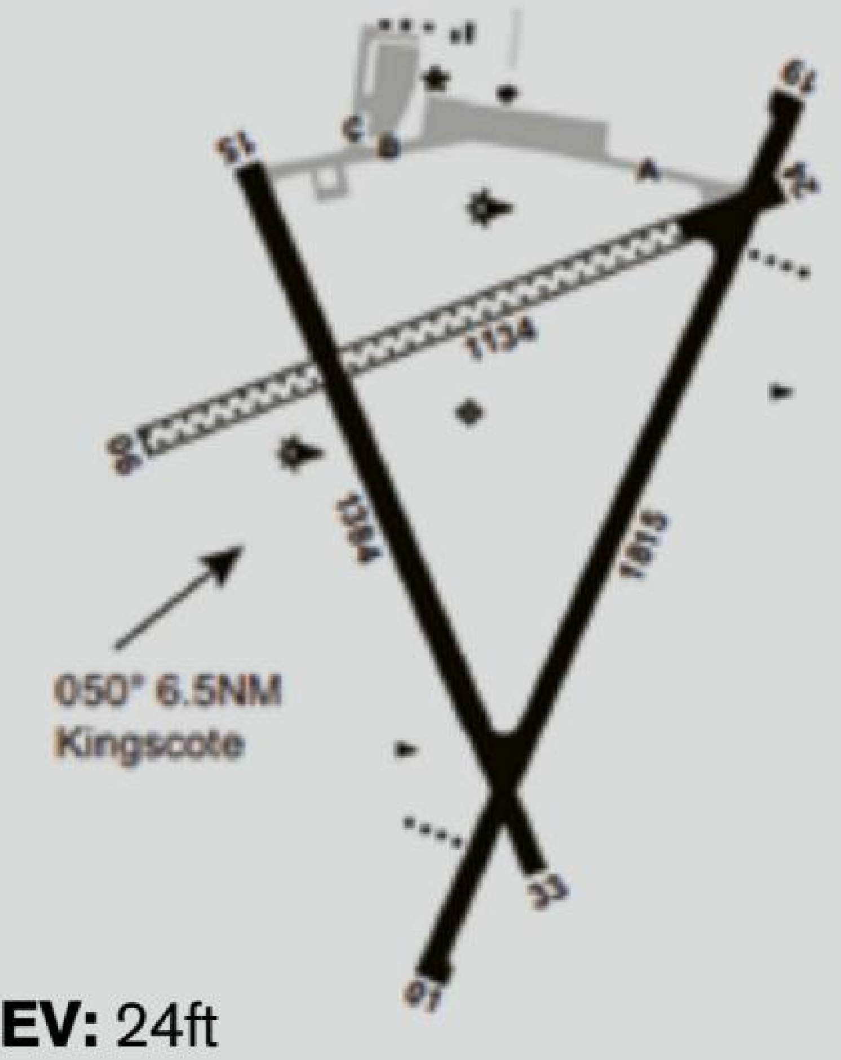
For such a remote destination, there is a huge variety of accommodation on Kangaroo Island. Set up shop at a beachside cottage or cabin, or hide away in the island's heartland at a farm stay or tiny home. You'll need at least a few days to explore this beautiful island.

EXPLORE

So many things to explore, such little space to write! The best way to explore the island is to just start driving – be sure to watch out for all the wildlife! The warmer months lend themselves to beach hopping and hiking along the pristine coastline (see: Vivonee Bay Beach). As weather cools down, the wilderness dials up, with whale watching, rushing waterfalls and lush bushland to explore.

EAT & DRINK

The fertile lands of Kangaroo Island mean that great local produce is abundant. Enjoy incredibly fresh seafood, paddock to plate experiences and of course the island's famous honey. This island is a foodie mecca, so you'll be hard-pressed to find a bad feed here. Some highlights include the Emu Bay Lavendar Farm and The Enchanted Fig for a some truly unique dining experiences.



ELEV: 24ft
RWY: RWY 01/19 1815m, sealed
RWY 06/24 1134m, gravel
RWY 15/33 1384m, seal

CTAF: 126.0

MELB CENTRE: 123.05

AD OPR:
Kangaroo Island Council
kiairport@kicouncil.sa.gov.au
08 8553 4532

AD CHARGES: Charges may apply. Contact AD OPR for details.

REMARKS: This is a security-controlled airport (ASIC required). Concentration of birds and wallabies in vicinity. Refer to ERSA for full more airport details.

AVGAS: Nil. Nearest fuel is Aldinga or Goolwa (mainland South Australia)

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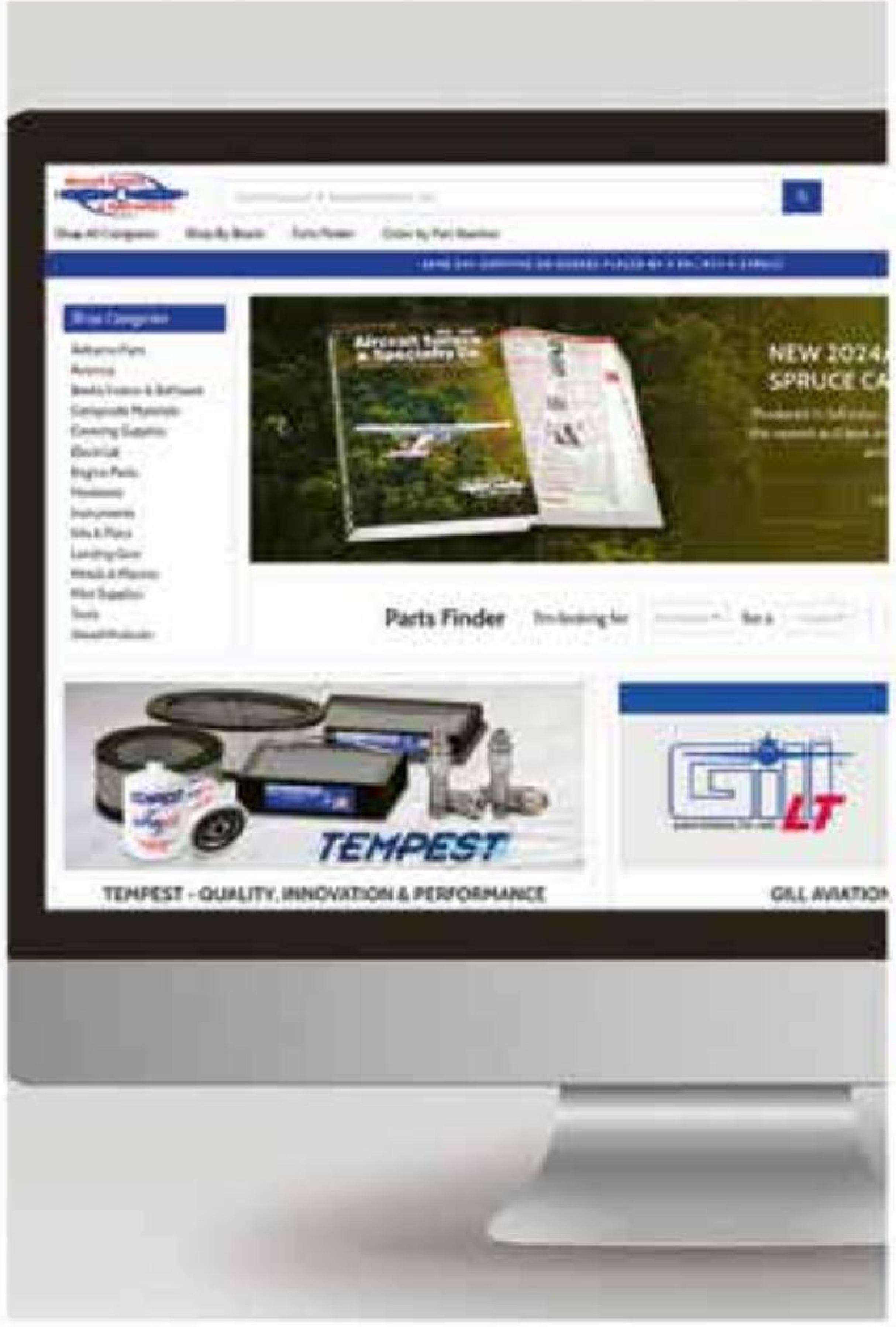

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Eurofox 3K – 5051

2230 Airframe Hours, 510 Engine Hours, 100HP. One of the nicest flying RAAus aircraft available. STOL performance with close to 100KIAS cruise all while sipping less than 20 litres of MOGAS an hour. Comfy seats and good instrumentation means that you will enjoy touring to all those destinations you've always wanted to visit.
Steven Bekker – 0427 519 163
$82,000

Challenger 2 by Quad City Ultralight

499 Airframe Hours, 220hrs Engine Hours. Rotax 582 220hrs. Lowrance 2000 GPS, Icom radio, Headsets x2 and intercom, BRS 900 Balistic Recovery system, Aux fuel tank, tricycle U/C, Registered Fully enclosed trailer & Spares.
Steve Ridley – 0408 284 799
$25,000

Cheetah XLS

214 Airframe Hours, 214 Engine Hours. The Cheetah XLS (precursor to the BushCat) is a very versatile aircraft. Well built and strong enough to handle almost anything. STOL capabilities. Cruise up to 90kts. Very comfortable to fly. Forgiving enough for the beginner and capable enough for the experienced pilot alike. LAME maintained.
Mustafa – 0408 516 816
$75,000

Allegro 2000

411 Airframe Hours, 411 Engine Hours. Popular European trainer, beautiful low hour Czech Republic factory made Light Sport 2 seater. Easy to maintain, composite & Kevlar fuselage aluminium wings very economical to run. Fuel consumption is 11.5 L per hour at 4100 RPM. Rotax 80hp. Cruising 90 knots. VNE 119 knots, STOL 35 knots. 55L fuel tank.
Miroslav Pekar – 0426 613 113
$65,000

Quicksilver Sport 2S

70 Airframe Hours, 70 Engine Hours. Quicksilver 2S 2 seat aircraft, one of the safest and easiest aircraft to fly, all instrumentation including radio & intercom, Rotax 582 65HP only TT 70 hours, tundra tyres for beach or paddock landings. Flies excellent.
Gordon Young – 0412 890 582
$18,750

Jabiru LSA 55/3J

1278.0 Airframe Hours, 14.0 Engine Hours. Registration 55-4179 Registered until 8th September 2024, Manufacture date 27/08/2004 Serial No. 623, Total airframe hours 1278.0, Engine rebuilt to last of the Gen 3 specifications, roller cam etc. Engine TSO 14.0hr, All log books.
Brendan Reidy – 0427 057 447
$37,500

Airborne T-Lite with Core wing and Bailey 200 motor

71.5 Airframe Hours, 71.5 Engine Hours, T-Lite TL-200-009
71.5 hours. Excellent condition, kept rigged and hangared. New TinyTach r.p.m. and engine temp meter. Strobe, ASI. All log books, manuals and maintenance records since new. Parachute repacked 2022.
New harness, tyres, rubbers.
William Ditcham – 0421 339 399
$9,000

Aircraft 24-5481

Factory built August 2008. Airframe and engine hours 704. Second owner since 11/11/2015. Always hangered, location YGWA, fully maintained by LAME / L2. Next annual due Jan 2025.
Murray William Nitschke – 0411 722 953
$75,000

Quicksilver MXL-2

595 Airframe Hours, nil Engine Hours, trailer – with spare engine – that needs to be pulled apart. Trailer may need temporary registration.
Neville Leonard – 0407 716 636
$9,000

Brumby 610

205 Airframe Hours, 205 Engine Hours, 610. Always hangared.
John Cusack – 0425 358 679
$125,000

Macho Elite (and Quicksilver)

1013 Airframe Hours, nil Engine Hours. Macho Elite – body painted as an endangered species, Leopard Cod, wings unpainted.
Neville Leonard – 0407 716 636
$5,000

Airbourne XT 912

284 approx still flying Airframe Hours, 284 Engine Hours. Low hour airborne xt912 excellent condition new streak 3 wing at 80 hours. Battens just reset flies excellent
Terry Blackford – 0428 515 000
$19,000

Australian Lightwing GR-582
1592 Airframe Hours, 529 Engine Hours, Good condition. Hangared Lockyer Valley. Extra engine and parts included.
Paul Robind – 0427 622 176
$25,000

Brumby 610
297 Airframe Hours, 297 Engine Hours. Rotax 912 iS, Airmaster CS 3 blade prop Dynon HDX D1000 Garmin GTR 200, Hangared from new.
Adrian Fitzgerald – 0428 899 525
$130,000

Jodel D11
1800 Airframe Hours, 1800 Engine Hours. Jodel D11, 19-7519 Cont O-200, 1800hrs, always hangared, radio & basic instruments.
Mark Tait – 0413 289 604
$15,000

KaratooJ6
638 Airframe Hours, 238 Engine Hours. Karatoo J6 neat tidy fun to fly located Robe SA.
Kilner – 0419 009 442
$30,000

LightWing GR-912
1426 Airframe Hours, 1426 Engine Hours. Newly refurbished aircraft. Excellent condition. Located in Kingston SE SA.
Stephen Edwards – 0407 672 372
$19,000

Stinson 108-2
2100 Airframe Hours, TT 1454, TSOH 90. My Stinson needs a new home. It was rebuilt and was flying in the 1990's. Circumstances led to it being dismantled and transported to the present location.
Allan Morris – 0425 660 619
$20,000

Zenair STOL CH701
332 Airframe Hours, 332 Engine Hours. Rotax 914 Turbo 115 hp, Bubble doors for 110 cm cabin width, Laptop with optimisation software and adapters for motor parameters. 0413 608 551
$53,900

Zenith CH701
369.9 Airframe Hours, 1201.9 Engine Hours. Great plane, fun flying, very robust design
21" mains tyres, Rotax 912uls has heaps of grunt. Cruises around 78kts
Open to offers.
Claudio DeMarchi – 0404 958 752
$35,000

Bat Hawk R
370.6 Airframe Hours, 370.6 Engine Hours. Certified LSA Aircraft, ideal for true back to basics Ultralight Training or for the keen bush pilot. Bat Hawk's propeller up and out of the way it reduces the risk of damage by grass, sticks, stones and sand. Making it a true "Bush Plane".
Ross Prebble – 0407 083 016
$37,000

Fisher Youngster
TBA Airframe Hours, nil Engine Hours. The aircraft has been in storage for 10 years+, Deceased Estate. Based at Gilgandra NSW EA81 engine installed. Jabiru 1600 (16A11) can be included or sold separately. 2 spare wooden propellers, included, or sold separately. DME radio seperate
Tim McClelland – 0404 499 281
$3,000

912 Fisher Drifter
2193 Airframe Hours, 2193 Engine Hours, Drifter as above.
Hugh – 0428 400 737
$39,000

Moyes-Bailey Dragonfly
554 Airframe Hours, 554 Engine Hours, Dragonfly C. Factory built C-series Dragonfly, 554 h on engine and airframe. 80hp Rotax 912. Hangared near York in WA.
Mirek Generowicz – 0427 778 280
$50,000

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Foxbat Kelpie A22LS

2562 Airframe Hours, 2562 Engine Hours. New three blade E-Prop and major 2000 hour overhaul in January 2024 with Smart Air at Albury NSW. Engine is now on condition but as new – uses no oil and excellent compression, strict 100 hourly services all fluids and filters.
Murray Alston – 0408 031 776
$98,000

Luscombe 8E

At 635kg MTOW, Built in 1946 art-deco Luscombe. 1748 hours engine, airframe and prop. Continental 85HP. 29 hrs since top OH, 20hrs since magneto OH 80kts. Consumes 17 liters per hour.
Derek Viner
$60,000

2007 Jabiru 230D aircraft

820.9 Airframe Hours, 820.9 Engine Hours. Low hour 2007 Jab 230D. Factory built. Exterior 9/10. Interior 8/10 Comes with recent Annual, Condition report available from LAME who has serviced the aircraft for the past 4 years. Original logbook. Always hangared.
Robert Norman Heal – 0429 038 804
$75,000

Savannah S

10 months old, exceptional performance. Always hangared. 65 hours total time. Edge Performance 120 HP, fuel injected Rotax 912. Long range tanks, 160 lts. Park brake, Tundra tyres, wing nav/ beacon lights, Trig VHF radio, panel mounted Garmin Area 660 GPS, electronic trim, 72 inch Bolly Prop, 3 point door latch, 2 pack paint, jump start inlet.
Ian Graham – 0419 703 926
$135,000

2009 Airborne XT Tundra 912

601 Airframe Hours, 601 Engine Hours. Arrow spec wing with winglets. Comes with Trike trailer and flying helmets/gear. One owner all documents current incl servicing. Located Bunbury WA.
Ian Bawden – 0408 610 604
$24,000

Savannah S

515 Airframe Hours, 515 Engine Hours. Built 2015, 912 100hp Rotax Engine, good condition, always hangared, near new Tundra tyres, tail beacon light, Garmin Aera 500 GPS, Xcom VHF Radio, long range tanks, 150lts total, Bolly Prop, 12 months Rego.
Ian Graham – 0419 703 926
$78,000

Savannah S

375 Airframe Hours, 375 Engine Hours/ This aircraft could be described as “Best in Class”.
Charles Mollison – 0421 126 395
$99,000

Drifter Built 199

900 Airframe Hours, 100 Engine Hours. SB-Drifter Built 1996 Airframe – 900 hours. Engine: Rotax 582 – 100 hours, Hangered at Lethbridge Airport, Victoria.
Dave – 0417 015 307
$25,000

Esqual VM-1

749.4 Airframe Hours, 792.3 Engine Hours, VM-1.Kit Built. First registered Sep 2004. All composite construction. Solid 115kt cruise. 544Kg MTOW. 324Kg empty weight. 115Litres fuel in wing tanks. Large Electric flaps – VSO 35 kts. Annual completed FEB2024 with 5 year rubber replacement. New E-Prop.
Michael Scott – 0422 430 915
$70,000

Jabiru J200B 3300

530 Airframe Hours, 530 Engine Hours, owned since 28/01/2019, based in Gawler SA. Excellent condition, always hangared, Rotec LCH kit fitted, Rotec alternator fitted, Rotec ignition fitted, flies perfectly.
Stuart McColl – 0411 452 688
$55,000

Brumby 600

310 Airframe Hours. Always Hangared Jabiru 3300 Engine with watercooled heads. Selling as have too many Aircraft.
Doug – 07 5543 0300
$79,000

Zenith CH701 & House

176.7 Airframe Hours, 269 Engine Hours. Zenith CH701 & house at Yerranderie next to the airstrip. 20 minute flight to Camden or 15 to The Oaks. The house has a detached self contained cabin for guests. House details with videos are at 20AlanStreet.com.
Robert Thompson – 0429 493 828
$375,000

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FINAL APPROACH

BY NICHOLAS HEATH

A BRIGHT HORIZON FOR RAAUS

> **People flying in the VH space are looking at the potential in RAAus and figuring that it could fulfill their mission for a lot less money.**

It's no secret that the Australian economy isn't in great shape right now. RAAus members have suffered like everyone. But I have to say that the interest in RAAus and associated aircraft and products is strong. We know, because people contact us with products seeking advertising and I can't remember ever seeing it this strong. I think part of the reason is that a lot of people flying in the VH space are looking at the potential in RAAus and figuring that it could fulfill their mission for a lot less money. Take the cover shot of this edition. That aircraft represents a new capacity within RAAus. It's as fast and much more economical than the VH equivalent. Add to that the imminent arrival of access to controlled airspace and you don't have to wonder why many are considering the switch. RAAus is changing too. If you look at the register now, out of the 3,195 aircraft currently listed, a very small percentage of these are of the rag and tube variety that light sport aviation was founded on. At the last Australian International Airshow, the emphasis on recreational aviation was the highest I had ever seen. With the next airshow just a few months away, I'm sure we will again see a jump in presence. I'm predicting 2025 will be a huge year for our category of aviation.

For any of you coming to the Australian International Airshow in 2025, I'll be there, along with the SportPilot team and the RAAus team, hanging out mostly at the RAAus display area. Come and say hello and tell us about your flying stories. In the meantime, safe flying to all.

P92 Echo MK2

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